

City Council Contract Agenda Items Review Checklist

Reviewer: _____

Date Received: _____

Date: 9/30/15Department: DPW Division: CITY ENGINEERINGDept Head/Contact Person: Adrienne D. Smith Phone No.: 313-224-3950Description: PW-6972 HMA Resurfacing & Misc Construction on W. Grand Blvd & W. Vernor...Contract No.: 2913189 PO Type: CPO Est. Value: \$3,868,460.92Contract Term (if applicable): From date on Start Work Notice (after CC Approval) to December 31, 2017Funding: City: 100% Street Fund, State _____ % Federal _____ % Other: _____ %
(Documentation must be furnished by the Dept. if anything other than City funding)Recommended Supplier: Fort Wayne Contracting, Inc/Ajax Paving Industries, Inc, a joint ventureRequired Date: 10/16/2015

-
1. The business being awarded is NEW. If a renewal, provide justification for renewal: _____

 2. Was the product or service competitively bid? ☒ Yes ☐ No
Attach Copy of Bid Tabulation/Evaluation score sheets as needed
If the answer to #2 is "NO" explain why there was no competition: _____

 3. Was a Co-Operative Agreement Considered? ☐ Yes ☒ No Co-Operative Name: _____
If answer to #3 is "No" explain why a Co-Op was not considered: N/A - Construction
 4. Were savings achieved?
☐ Yes Amount \$ _____ ☐ No

City Council Contract Agenda Items Review Checklist

5. Does this agreement represent an increase? **NO**

☐ Variance in unit price only (Current unit price \$0.00 Proposed Unit Price \$0.00)

☐ Change in amount/volume of the good or service to be used. _____.

6. Does the supplier currently provide other goods and services to the City? ☒ Yes ☐ No

If yes please list: **Other Street Improvement contracts**

7. Is this good/service used by other departments? ☐ Yes ☒ No

If "yes" can this Req/PAR be combined other department requirements? ☐ Yes ☐ No

8. Is this a service that can be performed by City employees? ☒ Yes ☐ No

Is this a service that City employees can be trained to do? ☒ Yes ☐ No

NOTES: Buyer:

a. Excluded Parties List / Supplier Award Management Website Reviewed? Yes _____ No _____

☐

PLACE ON FINANCIAL REVIEW COMMISSION AGENDA

☐

PLACE ON CITY COUNCIL AGENDA

☐

REJECT AND NOTIFY DEPARTMENT DIRECTOR:

SIGNED: _____

Adrienne D. Smith

(Department)

DATE: _____

9/30/15

INFORMATION PROVIDED BY: **Adrienne D. Smith**

TITLE: **Administrative Assistant III**

PHONE: **313-224-3950**

MINIMUM MERGING TAPER LENGTH "L" (FEET)

OFFSET FEET	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)										TAPER LENGTH "L" IN FEET
	25	30	35	40	45	50	55	60	65	70	
1	10	15	20	27	45	50	55	60	65	70	
2	21	30	41	53	90	100	110	120	130	140	
3	31	45	61	80	135	150	165	180	195	210	
4	42	60	82	107	180	200	220	240	260	280	
5	52	75	102	133	225	250	275	300	325	350	
6	63	90	123	160	270	300	330	360	390	420	
7	73	105	143	187	315	350	385	420	455	490	
8	83	120	163	213	360	400	440	480	520	560	
9	94	135	184	240	405	450	495	540	585	630	
10	104	150	204	267	450	500	550	600	650	700	
11	115	165	225	293	495	550	605	660	715	770	
12	125	180	245	320	540	600	660	720	780	840	
13	135	195	266	347	585	650	715	780	845	910	
14	146	210	286	374	630	700	770	840	910	980	
15	157	225	307	400	675	750	825	900	975	1050	

THE FORMULAS FOR THE MINIMUM LENGTH OF A MERGING TAPER IN DERIVING THE "L" VALUES SHOWN IN THE ABOVE TABLES ARE AS FOLLOWS:

"L" = $\frac{W \times S^2}{60}$ WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 40 MPH OR LESS

"L" = S x W WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 45 MPH OR GREATER

L = MINIMUM LENGTH OF MERGING TAPER

S = POSTED SPEED LIMIT IN MPH PRIOR TO WORK AREA

W = WIDTH OF OFFSET

TYPES OF TAPERS

UPSTREAM TAPERS

MERGING TAPER

SHIFTING TAPER

SHOULDER TAPER

TWO-WAY TRAFFIC TAPER

DOWNSTREAM TAPERS

(USE IS OPTIONAL)

TAPER LENGTH

L - MINIMUM

1/2 L - MINIMUM

1/3 L - MINIMUM

100' - MAXIMUM

100' - MINIMUM

(PER LANE)



TRAFFIC AND SAFETY
MAINTAINING TRAFFIC
TYPICAL

TABLES FOR "L", "D" AND "B" VALUES

DRAWN BY: CDH:AE:d,f

JUNE 2006

M0020a

SHEET

CHECKED BY: BMW

PLAN DATE:

1 OF 2

FILE: \\s:\OGM\TSR\STD5\ENGLISH\WITTRF\M0020a.dgn

REV. 08/21/2006

**DISTANCE BETWEEN TRAFFIC CONTROL DEVICES "D"
AND LENGTH OF LONGITUDINAL BUFFER SPACE ON
"WHERE WORKERS PRESENT" SEQUENCES**

"D" DISTANCES	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)									
	25	30	35	40	45	50	55	60	65	70
D (FEET)	250	300	350	400	450	500	550	600	650	700

**GUIDELINES FOR LENGTH OF
LONGITUDINAL BUFFER SPACE "B"**

SPEED* MPH	LENGTH FEET
20	33
25	50
30	83
35	132
40	181
45	230
50	279
55	329
60	411
65	476
70	542

+ POSTED SPEED, OFF PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

1 BASED UPON AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) BRAKING DISTANCE PORTION OF STOPPING SIGHT DISTANCE FOR WET AND LEVEL PAVEMENTS (A POLICY ON GEOMETRIC DESIGN OF HIGHWAY AND STREETS), AASHTO. THIS AASHTO DOCUMENT ALSO RECOMMENDS ADJUSTMENTS FOR THE EFFECT OF GRADE ON STOPPING AND VARIATION FOR TRUCKS.

MDOT
Michigan Department of Transportation
TRAFFIC AND SAFETY
MAINTAINING TRAFFIC
TYPICAL

TABLES FOR "L", "D" AND "B" VALUES

DRAWN BY: CON:AE:0,f

JUNE 2006

M0020a

SHEET

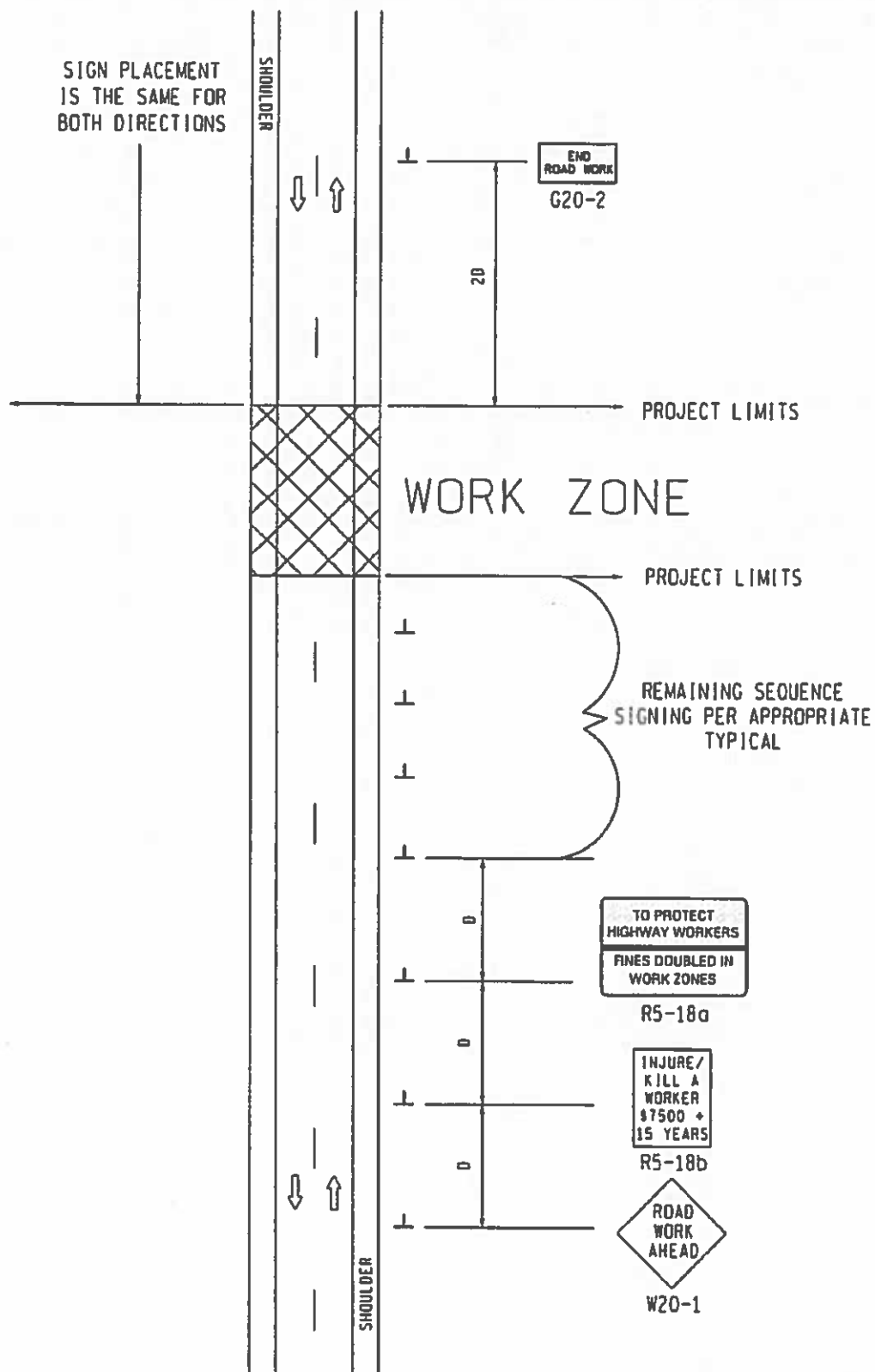
CHECKED BY: BMM

PLAN DATE:

2 OF 2

FILE: K:/DOT/TSR/SDS/ENGLISH/MTTRF/M0020a.dgn

REV. 08/21/2006



SIGN = 68 f+2 - TYPE B
FOR ONE DIRECTION OF TRAFFIC
W20-1 QUANTITY INCLUDED
WITH APPROPRIATE TYPICAL
FOR SEQUENCE SIGNING



TRAFFIC AND SAFETY
MAINTAINING TRAFFIC
TYPICAL

TYPICAL ADVANCE SIGNING TREATMENT FOR LONG,
INTERMEDIATE AND SHORT TERM STATIONARY
WORK ZONE OPERATIONS OF LESS THAN TWO
MILES IN LENGTH WHERE TRAFFIC CONTROL
DEVICES MAY REMAIN AT END OF WORK DAY
ON AN UNDIVIDED TWO-WAY ROADWAY

DRAWN BY: CON:AE:djf

OCTOBER 2011

CHECKED BY: BHM:CRB

PLAN DATE:

M0040a

SHEET
1 OF 2

NOT TO SCALE

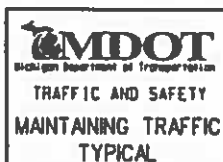
FILE: PW RD/TS/Typicals/Signs/MT NON FRY/M0040a.dgn REV. 10/13/2011

NOTES

30. THE APPROPRIATE ADVANCE SIGNING SEQUENCE(S), (M0030a THROUGH M0080a) SHALL BE USED ON ALL PROJECTS.
32. THESE SIGNS SHALL BE LEFT IN PLACE AT THEIR PRESCRIBED LOCATIONS FOR THE DURATION OF THE PROJECT AND UNTIL ALL TEMPORARY TRAFFIC CONTROL HAS BEEN REMOVED.
35. THESE SIGNS ARE INTENDED TO BE USED WITHIN THE LIMITS OF THE TEMPORARY SEQUENCE SIGNING AS IS SHOWN ON 1 OF 2. THESE SIGNS ARE NOT TO BE INTERMINGLED WITH ANY OTHER TEMPORARY SEQUENCE SIGNING EXCEPT AS SHOWN.

SIGN SIZES

G20-2	-	48" x 24"
R5-18a	-	96" x 60"
R5-18b	-	48" x 60"
W20-1	-	48" x 48"



TYPICAL ADVANCE SIGNING TREATMENT FOR LONG, INTERMEDIATE AND SHORT TERM STATIONARY WORK ZONE OPERATIONS OF LESS THAN TWO MILES IN LENGTH WHERE TRAFFIC CONTROL DEVICES MAY REMAIN AT END OF WORK DAY ON AN UNDIVIDED TWO-WAY ROADWAY

DRAWN BY: CON:AE:djf

OCTOBER 2011

CHECKED BY: BMM:CRB

PLAN DATE:

M0040a

SHEET
2 OF 2

NOT TO SCALE

FILE: PW RD/TS/Typicals/Signs/MT NON FWY/M0040a.dgn REV. 10/13/2011






PLACE THROUGHOUT WORK AREA AS INDICATED AND AFTER ALL MAJOR CROSSROADS IF PERMANENT SIGNS ARE NOT IN PLACE.

PLACE THIS SIGN ALONG WITH THE ADVANCE WORK ZONE SIGNING AS DEPICTED ON THE APPROPRIATE TYPICAL M0030a-M0080a.

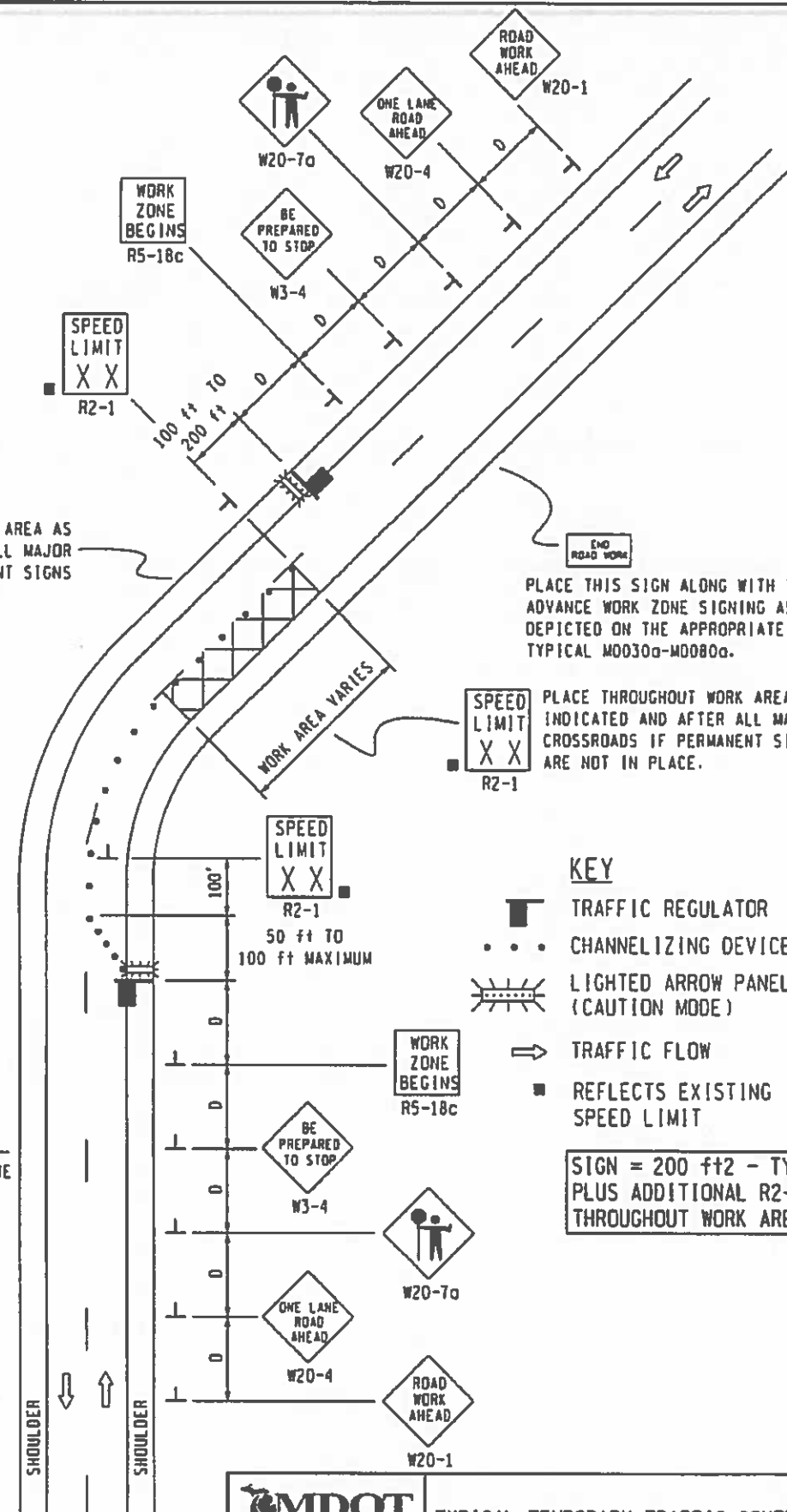
PLACE THROUGHOUT WORK AREA AS INDICATED AND AFTER ALL MAJOR CROSSROADS IF PERMANENT SIGNS ARE NOT IN PLACE.

PLACE THIS SIGN ALONG WITH THE ADVANCE WORK ZONE SIGNING AS DEPICTED ON THE APPROPRIATE TYPICAL M0030a-M0080a.

KEY

-  TRAFFIC REGULATOR
-  CHANNELIZING DEVICES
-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  REFLECTS EXISTING SPEED LIMIT

SIGN = 200 ft ± - TYPE B PLUS ADDITIONAL R2-1's THROUGHOUT WORK AREA



MDOT
Michigan Department of Transportation
TRAFFIC AND SAFETY
MAINTAINING TRAFFIC
TYPICAL

TYPICAL TEMPORARY TRAFFIC CONTROL FOR
A TWO-LANE TWO-WAY ROADWAY WHERE ONE
LANE IS CLOSED UTILIZING TRAFFIC
REGULATORS. NO SPEED REDUCTION

DRAWN BY: CON:AE:djf
CHECKED BY: BMM:CRB

OCTOBER 2011
PLAN DATE:

M0140a

SHEET
1 OF 2

NOT TO SCALE

FILE: PW RD/T5/Typicals/Signs/MT NON FWY/M0140a.dgn REV. 10/04/2011


NOTES

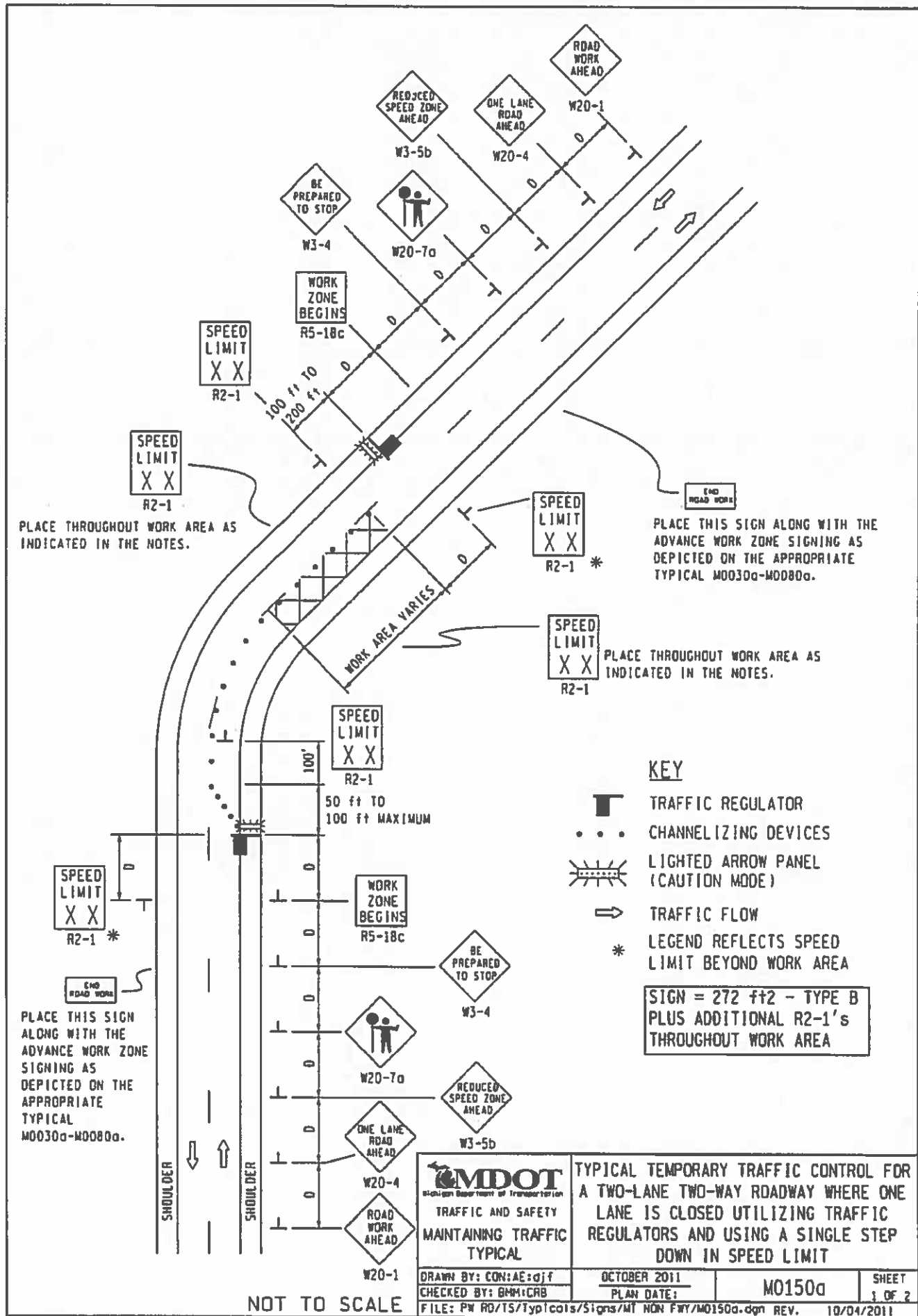
- 1H. D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES AND LENGTH OF LONGITUDINAL BUFFERS
SEE M0020a FOR "D" VALUES.
2. ALL NON-APPLICABLE SIGNING WITHIN THE CIA SHALL BE MODIFIED TO FIT CONDITIONS. COVERED OR REMOVED.
3. DISTANCES BETWEEN SIGNS, THE VALUES FOR WHICH ARE SHOWN IN TABLE D, ARE APPROXIMATE AND MAY NEED ADJUSTING AS DIRECTED BY THE ENGINEER.
- 3A. THE "WORK ZONE BEGINS" (R5-18c) SIGN SHALL BE USED ONLY IN THE INITIAL SIGNING SEQUENCE IN THE WORK ZONE. SUBSEQUENT SEQUENCES IN THE SAME WORK ZONE SHALL OMIT THIS SIGN AND THE QUANTITIES SHALL BE ADJUSTED APPROPRIATELY.
- 4A. THE MAXIMUM RECOMMENDED DISTANCE(S) BETWEEN CHANNELIZING DEVICES IN THE TAPER AREA(S) SHOULD BE 15 FEET AND SHOULD BE EQUAL IN FEET TO TWICE THE POSTED SPEED IN MILES PER HOUR IN THE PARALLEL AREA(S).
5. FOR OVERNIGHT CLOSURES, TYPE III BARRICADES SHALL BE LIGHTED.
6. WHEN CALLED FOR IN THE FHWA ACCEPTANCE LETTER FOR THE SIGN SYSTEM SELECTED, THE TYPE A WARNING FLASHER, SHOWN ON THE WARNING SIGNS, SHALL BE POSITIONED ON THE SIDE OF THE SIGN NEAREST THE ROADWAY.
7. ALL TEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND LIGHTING REQUIREMENTS SHALL MEET NCHRP 350 CRASHWORTHLY REQUIREMENTS STIPULATED IN THE CURRENT EDITION OF THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS. ONLY DESIGNS AND MATERIALS APPROVED BY MDT WILL BE ALLOWED.
9. ALL TRAFFIC REGULATORS SHALL BE PROPERLY TRAINED AND SUPERVISED.
- 9A. IN ANY OPERATION INVOLVING MORE THAN ONE TRAFFIC REGULATOR, ONE PERSON SHOULD BE DESIGNATED AS HEAD TRAFFIC REGULATOR.
10. ALL TRAFFIC REGULATORS' CONDUCT, THEIR EQUIPMENT, AND TRAFFIC REGULATING PROCEDURES SHALL CONFORM TO THE CURRENT EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CURRENT EDITION OF THE MDT HANDBOOK ENTITLED "TRAFFIC REGULATORS INSTRUCTION MANUAL."
11. WHEN TRAFFIC REGULATING IS ALLOWED DURING THE HOURS OF DARKNESS, APPROPRIATE LIGHTING SHALL BE PROVIDED TO SUFFICIENTLY ILLUMINATE THE TRAFFIC REGULATOR'S STATIONS.
- 12E. THE MAXIMUM DISTANCE BETWEEN THE TRAFFIC REGULATORS SHALL BE NO MORE THAN 2 MILES IN LENGTH UNLESS RESTRICTED FURTHER IN THE SPECIAL PROVISIONS FOR MAINTAINING TRAFFIC. ALL SEQUENCES OF MORE THAN 2 MILES IN LENGTH WILL REQUIRE WRITTEN PERMISSION FROM THE ENGINEER BEFORE PROCEEDING.
13. WHEN INTERSECTING ROADS OR SIGNIFICANT TRAFFIC GENERATORS (SHOPPING CENTERS, MOBILE HOME PARKS, ETC.) OCCUR WITHIN THE ONE-LANE TWO-WAY OPERATION, INTERMEDIATE TRAFFIC REGULATORS AND APPROPRIATE SIGNING SHALL BE PLACED AT THESE LOCATIONS.
14. ADDITIONAL SIGNING AND/OR ELONGATED SIGNING SEQUENCES SHOULD BE USED WHEN TRAFFIC VOLUMES ARE SIGNIFICANT ENOUGH TO CREATE BACKUPS BEYOND THE W3-4 SIGNS.
15. THE HAND HELD (PADDLE) SIGNS REQUIRED BY THE MMUTCD TO CONTROL TRAFFIC WILL BE PAID FOR AS PART OF FLAG CONTROL.
- 28E. THE TRAFFIC REGULATORS SHOULD BE POSITIONED AT OR NEAR THE SIDE OF THE ROAD SO THAT THEY ARE SEEN CLEARLY AT A MINIMUM DISTANCE OF 500 FEET. THIS MAY REQUIRE EXTENDING THE BEGINNING OF THE LANE CLOSURE TO OVERCOME VIEWING PROBLEMS CAUSED BY HILLS AND CURVES.

SIGN SIZES

DIAMOND WARNING - 48" x 48"
 R2-1 REGULATORY - 48" x 60"
 R5-18c REGULATORY - 48" x 48"

NOT TO SCALE

 MICHIGAN DEPARTMENT OF TRANSPORTATION TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL		TYPICAL TEMPORARY TRAFFIC CONTROL FOR A TWO-LANE TWO-WAY ROADWAY WHERE ONE LANE IS CLOSED UTILIZING TRAFFIC REGULATORS. NO SPEED REDUCTION	
		DRAWN BY: CON:AE:djf CHECKED BY: BMM:CRB	OCTOBER 2011 PLAN DATE:
FILE: PW RD/TS/Typicals/Signs/MT NON FWY/M0140a.dgn REV. 10/04/2011			



NOTES

- 1H. D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES AND LENGTH OF LONGITUDINAL BUFFERS
SEE M00200 FOR "D" VALUES.
2. ALL NON-APPLICABLE SIGNING WITHIN THE CIA SHALL BE MODIFIED TO FIT CONDITIONS, COVERED OR REMOVED.
3. DISTANCES BETWEEN SIGNS, THE VALUES FOR WHICH ARE SHOWN IN TABLE D, ARE APPROXIMATE AND MAY NEED ADJUSTING AS DIRECTED BY THE ENGINEER.
- 3A. THE "WORK ZONE BEGINS" (R5-18c) SIGN SHALL BE USED ONLY IN THE INITIAL SIGNING SEQUENCE IN THE WORK ZONE. SUBSEQUENT SEQUENCES IN THE SAME WORK ZONE SHALL OMIT THIS SIGN AND THE QUANTITIES SHALL BE ADJUSTED APPROPRIATELY.
- 4A. THE MAXIMUM RECOMMENDED DISTANCE(S) BETWEEN CHANNELIZING DEVICES IN THE TAPER AREA(S) SHOULD BE 15 FEET AND SHOULD BE EQUAL IN FEET TO TWICE THE POSTED SPEED IN MILES PER HOUR IN THE PARALLEL AREA(S).
5. FOR OVERNIGHT CLOSURES, TYPE III BARRICADES SHALL BE LIGHTED.
6. WHEN CALLED FOR IN THE FHWA ACCEPTANCE LETTER FOR THE SIGN SYSTEM SELECTED, THE TYPE A WARNING FLASHER, SHOWN ON THE WARNING SIGNS, SHALL BE POSITIONED ON THE SIDE OF THE SIGN NEAREST THE ROADWAY.
7. ALL TEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND LIGHTING REQUIREMENTS SHALL MEET NCHRP 350 CRASHWORTHLY REQUIREMENTS STIPULATED IN THE CURRENT EDITION OF THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS. ONLY DESIGNS AND MATERIALS APPROVED BY MDTT WILL BE ALLOWED.
9. ALL TRAFFIC REGULATORS SHALL BE PROPERLY TRAINED AND SUPERVISED.
- 9A. IN ANY OPERATION INVOLVING MORE THAN ONE TRAFFIC REGULATOR, ONE PERSON SHOULD BE DESIGNATED AS HEAD TRAFFIC REGULATOR.
10. ALL TRAFFIC REGULATORS' CONDUCT, THEIR EQUIPMENT, AND TRAFFIC REGULATING PROCEDURES SHALL CONFORM TO THE CURRENT EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CURRENT EDITION OF THE MDTT HANDBOOK ENTITLED "TRAFFIC REGULATORS INSTRUCTION MANUAL."
11. WHEN TRAFFIC REGULATING IS ALLOWED DURING THE HOURS OF DARKNESS, APPROPRIATE LIGHTING SHALL BE PROVIDED TO SUFFICIENTLY ILLUMINATE THE TRAFFIC REGULATOR'S STATIONS.
- 12E. THE MAXIMUM DISTANCE BETWEEN THE TRAFFIC REGULATORS SHALL BE NO MORE THAN 2 MILES IN LENGTH UNLESS RESTRICTED FURTHER IN THE SPECIAL PROVISIONS FOR MAINTAINING TRAFFIC. ALL SEQUENCES OF MORE THAN 2 MILES IN LENGTH WILL REQUIRE WRITTEN PERMISSION FROM THE ENGINEER BEFORE PROCEEDING.
13. WHEN INTERSECTING ROADS OR SIGNIFICANT TRAFFIC GENERATORS (SHOPPING CENTERS, MOBILE HOME PARKS, ETC.) OCCUR WITHIN THE ONE-LANE TWO-WAY OPERATION, INTERMEDIATE TRAFFIC REGULATORS AND APPROPRIATE SIGNING SHALL BE PLACED AT THESE LOCATIONS.
14. ADDITIONAL SIGNING AND/OR ELONGATED SIGNING SEQUENCES SHOULD BE USED WHEN TRAFFIC VOLUMES ARE SIGNIFICANT ENOUGH TO CREATE BACKUPS BEYOND THE W3-4 SIGNS.
15. THE HAND HELD (PADOLE) SIGNS REQUIRED BY THE MMUTCD TO CONTROL TRAFFIC WILL BE PAID FOR AS PART OF FLAG CONTROL.
- 16A. ADDITIONAL SPEED LIMIT SIGNS REFLECTING THE REDUCED SPEED SHALL BE PLACED AFTER EACH MAJOR CROSSROAD THAT INTERSECTS THE WORK AREA WHERE THE REDUCED SPEED IS IN EFFECT, AND AT INTERVALS ALONG THE ROADWAY SUCH THAT NO SPEED LIMIT SIGNS REFLECTING THE REDUCED SPEED ARE MORE THAN TWO MILES APART.
- 16B. WHEN REDUCED SPEED LIMITS ARE UTILIZED IN THE WORK AREA, ADDITIONAL SPEED LIMIT SIGNS RETURNING TRAFFIC TO ITS NORMAL SPEED SHALL BE PLACED BEYOND THE LIMITS OF THE REDUCED SPEED AS INDICATED.
- 16E. WHEN EXISTING SPEED LIMITS ARE REDUCED MORE THAN 10 MPH, THE SPEED LIMIT SHALL BE STEPPED DOWN IN NO MORE THAN 10 MPH INCREMENTS.
- 28E. THE TRAFFIC REGULATORS SHOULD BE POSITIONED AT OR NEAR THE SIDE OF THE ROAD SO THAT THEY ARE SEEN CLEARLY AT A MINIMUM DISTANCE OF 500 FEET. THIS MAY REQUIRE EXTENDING THE BEGINNING OF THE LANE CLOSURE TO OVERCOME VIEWING PROBLEMS CAUSED BY HILLS AND CURVES.

SIGN SIZES

DIAMOND WARNING - 48" x 48"
 RECTANGULAR REGULATORY - 48" x 60"
 R5-18c REGULATORY - 48" x 48"

NOT TO SCALE



TYPICAL TEMPORARY TRAFFIC CONTROL FOR
 A TWO-LANE TWO-WAY ROADWAY WHERE ONE
 LANE IS CLOSED UTILIZING TRAFFIC
 REGULATORS AND USING A SINGLE STEP
 DOWN IN SPEED LIMIT

DRAWN BY: CON:AE:djf

OCTOBER 2011

M01500

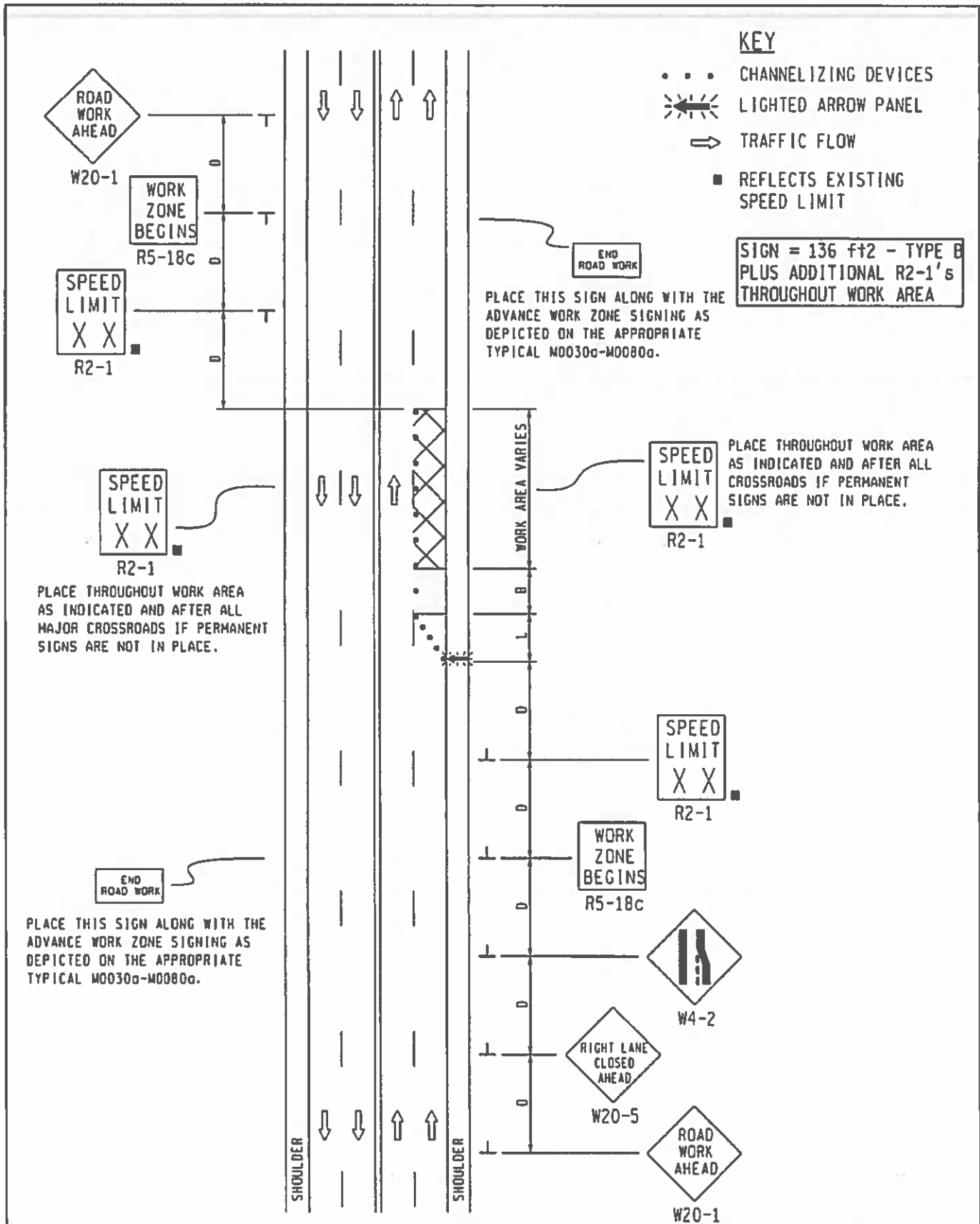
SHEET

CHECKED BY: BMM:CRB

PLAN DATE:

2 OF 2

FILE: PW RD/TS/Typicals/Signs/WT NON FWY/M01500.dgn REV. 10/04/2011



MDOT
Michigan Department of Transportation
TRAFFIC AND SAFETY
MAINTAINING TRAFFIC
TYPICAL

TYPICAL TEMPORARY TRAFFIC CONTROL
FOR A ONE-LANE CLOSURE ON AN
UNDIVIDED MULTI-LANE ROADWAY.
NO SPEED REDUCTION

DRAWN BY: CON:AE:djf
CHECKED BY: BMM:CRB

OCTOBER 2011
PLAN DATE:

M0240a

SHEET
1 OF 2

NOT TO SCALE

FILE: PW RD/T5/Typicals/Signs/MT NON FWY/M0240a.dgn REV. 10/11/2011


NOTES

- 1B. D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES
 L = MINIMUM LENGTH OF TAPER
 B = LENGTH OF LONGITUDINAL BUFFER
 SEE MO020a FOR "D," "L," AND "B" VALUES
2. ALL NON-APPLICABLE SIGNING WITHIN THE CIA SHALL BE MODIFIED TO FIT CONDITIONS, COVERED OR REMOVED.
3. DISTANCES BETWEEN SIGNS, THE VALUES FOR WHICH ARE SHOWN IN TABLE D, ARE APPROXIMATE AND MAY NEED ADJUSTING AS DIRECTED BY THE ENGINEER.
- 3A. THE "WORK ZONE BEGINS" (R5-18c) SIGN SHALL BE USED ONLY IN THE INITIAL SIGNING SEQUENCE IN THE WORK ZONE. SUBSEQUENT SEQUENCES IN THE SAME WORK ZONE SHALL OMIT THIS SIGN AND THE QUANTITIES SHALL BE ADJUSTED APPROPRIATELY.
- 4E. THE MAXIMUM RECOMMENDED DISTANCE(S) BETWEEN CHANNELIZING DEVICES SHOULD BE EQUAL IN FEET TO THE POSTED SPEED IN MILES PER HOUR ON TAPER(S) AND TWICE THE POSTED SPEED IN THE PARALLEL AREA(S).
5. FOR OVERNIGHT CLOSURES, TYPE III BARRICADES SHALL BE LIGHTED.
6. WHEN CALLED FOR IN THE FHWA ACCEPTANCE LETTER FOR THE SIGN SYSTEM SELECTED, THE TYPE A WARNING FLASHER, SHOWN ON THE WARNING SIGNS, SHALL BE POSITIONED ON THE SIDE OF THE SIGN NEAREST THE ROADWAY.
7. ALL TEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND LIGHTING REQUIREMENTS SHALL MEET NCHRP 350 CRASHWORTHLY REQUIREMENTS STIPULATED IN THE CURRENT EDITION OF THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS. ONLY DESIGNS AND MATERIALS APPROVED BY MDOT WILL BE ALLOWED.
8. WHEN BUFFER AREAS ARE ESTABLISHED, THERE SHALL BE NO EQUIPMENT OR MATERIALS STORED OR WORK CONDUCTED IN THE BUFFER AREA.
21. ALL EXISTING PAVEMENT MARKINGS WHICH ARE IN CONFLICT WITH EITHER PROPOSED CHANGES IN TRAFFIC PATTERNS OR PROPOSED TEMPORARY TRAFFIC MARKINGS, SHALL BE REMOVED BEFORE ANY CHANGE IS MADE IN THE TRAFFIC PATTERN. EXCEPTION WILL BE MADE FOR DAYTIME-ONLY TRAFFIC PATTERNS THAT ARE ADEQUATELY DELINEATED BY OTHER TRAFFIC CONTROL DEVICES.
26. THE LIGHTED ARROW PANEL SHALL BE LOCATED AT THE BEGINNING OF THE TAPER AS SHOWN. WHEN PHYSICAL LIMITATIONS RESTRICT ITS PLACEMENT AS INDICATED, THEN IT SHALL BE PLACED AS CLOSE TO THE BEGINNING OF THE TAPER AS POSSIBLE.

SIGN SIZES

DIAMOND WARNING - 48" x 48"
 R2-1 REGULATORY - 48" x 60"
 R5-18c REGULATORY - 48" x 48"

NOT TO SCALE

 Michigan Department of Transportation TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL		TYPICAL TEMPORARY TRAFFIC CONTROL FOR A ONE-LANE CLOSURE ON AN UNDIVIDED MULTI-LANE ROADWAY. NO SPEED REDUCTION	
DRAWN BY: CON:AE:djf CHECKED BY: BMM:CRB	OCTOBER 2011 PLAN DATE:	MO240a	SHEET 2 OF 2
FILE: PW RD/TS/Typicals/Signs/MT NON Fwy/MO240a.dgn REV. 10/11/2011			

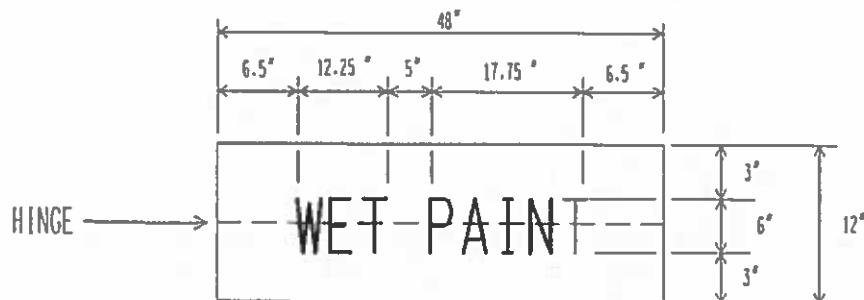
PAVEMENT MARKING SIGNS



END MAY BE SUBSTITUTED FOR BEGIN.

BEGIN/END CONVOY SIGNS REQUIRED ON FIRST/LAST VEHICLE, RESPECTIVELY.

NOTE: BEGIN/END CONVOY SIGNS SHALL HAVE BLACK LETTERS ON A REFLECTIVE WHITE BACKGROUND PER SECTION 9.22 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION



HORIZONTAL HINGE TO PERMIT FOLDING TOP HALF OF SIGN DOWN WHEN MARKING OPERATIONS ARE NOT IN PROGRESS. POSITION HINGE SO AS TO MINIMIZE SPLITTING HORIZONTAL ELEMENTS OF "E" AND "A".

HINGED SIGN REQUIRED ON FRONT OF APPLICATION VEHICLE IN ALL PAINTING CONVOYS WHERE THERE IS ONCOMING TRAFFIC.

NOTE: WET PAINT SIGN SHALL HAVE BLACK LETTERS ON A REFLECTORIZED ORANGE BACKGROUND PER SECTION 9.22 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

MDOT
Michigan Department of Transportation
TRAFFIC AND SAFETY
DIVISION

PAVEMENT MARKING CONVOY
TYPICAL FOR
SIGNS (ALL REGIONS)

File: pw: rd/tr/typ/final/pave markings/pmc22e
Drawn by: ABG

Rev. Date: 04/30/2012 lmf

PMC22e

SHEET
1 OF 1

SIGN MATERIAL SELECTION TABLE

SIGN SIZE	SIGN MATERIAL TYPE		
	TYPE I	TYPE II	TYPE III
≤ 36" X 36"		X	X
>36" X 36" ≤ 96" TO WIDE		X	
> 96" WIDE TO 144" WIDE	X	X	
> 144" WIDE	X		

TYPE I ALUMINUM EXTRUSION
 TYPE II PLYWOOD
 TYPE III ALUMINUM SHEET

ROUNDING OF CORNERS IS NOT REQUIRED FOR TYPE I OR II SIGNS.
 VERTICAL JOINTS ARE NOT PERMITTED.
 HORIZONTAL JOINTS THROUGH SIGN LEGEND OR SYMBOLS ARE NOT PERMITTED.

POST SIZE REQUIREMENTS TABLE

SIGN AREA (ft ²)	POST TYPE		
	U-CHANNEL STEEL	SQUARE TUBULAR STEEL	WOOD
≤ 9	1 - 3 lb/ft*	1 - 2" 12 or 14 GA*	N/A
9 ≤ 20	2 - 3 lb/ft	2 - 2" 12 or 14 GA	1 - 4" X 6"*
> 20 ≤ 30	N/A	N/A	2 - 4" X 6"
> 30 ≤ 60	N/A	N/A	2 - 6" X 8"
> 60 ≤ 84	N/A	N/A	3 - 6" X 8"

*SIGNS 4 FEET AND GREATER IN WIDTH REQUIRE 2 POSTS.
 SIGNS GREATER THAN 8 FEET IN WIDTH REQUIRE 2 OR 3 WOOD
 POSTS DEPENDING ON AREA OF SIGN.
 A MAXIMUM OF 2 POSTS WITHIN A 7' PATH IS PERMITTED.

NOT TO SCALE

File:PW/Doc/RD/T&S/Typ/Dev/Sign Main/raf B/WZD-100-A Rev. 8/21/06 ECH



PREPARED BY
 TRAFFIC AND SAFETY
 SUPPORT AREA

DRAWN BY: CON/ECH

CHECKED BY: AUG

ENGINEER OF DELIVERY

ENGINEER OF DEVELOPMENT

PENDING

FHWA APPROVAL DATE

MICHIGAN DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FOR

GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS

8/2006

PLAN DATE

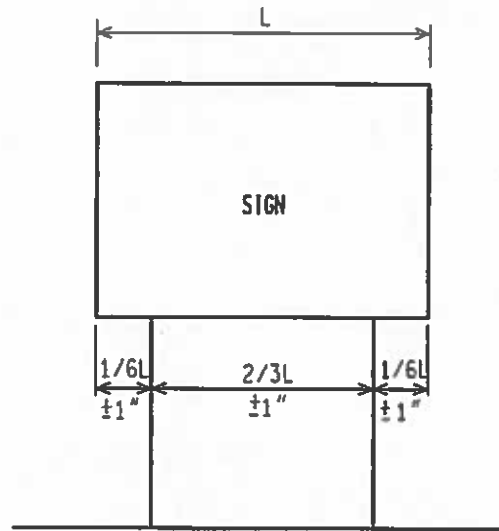
WZD-100-A

SHEET

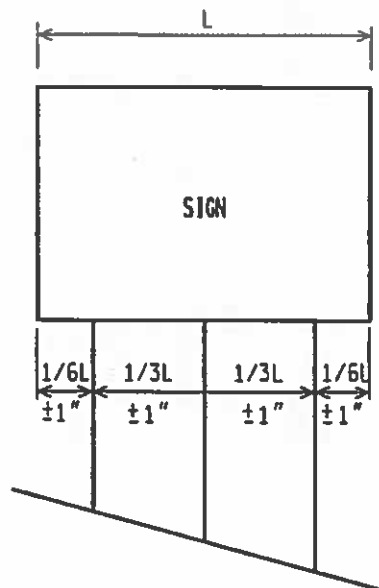
1 of 11

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

2 POST SIGN SUPPORT SPACING



3 POST SIGN SUPPORT SPACING

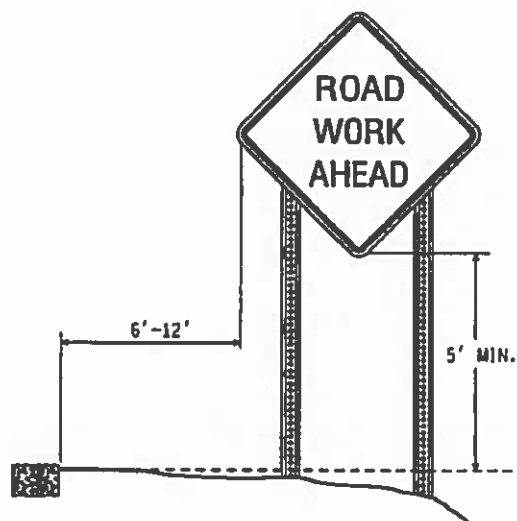


* FOR ALL 11' AND 12' LONG SIGNS ON 3 WOOD SUPPORTS, SPREAD POSTS SO AS TO HAVE A 8' MIN. TO 9' MAX. DISTANCE BETWEEN OUTSIDE POSTS.

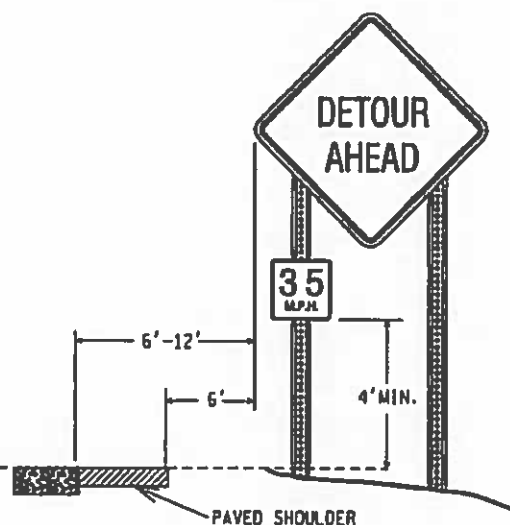
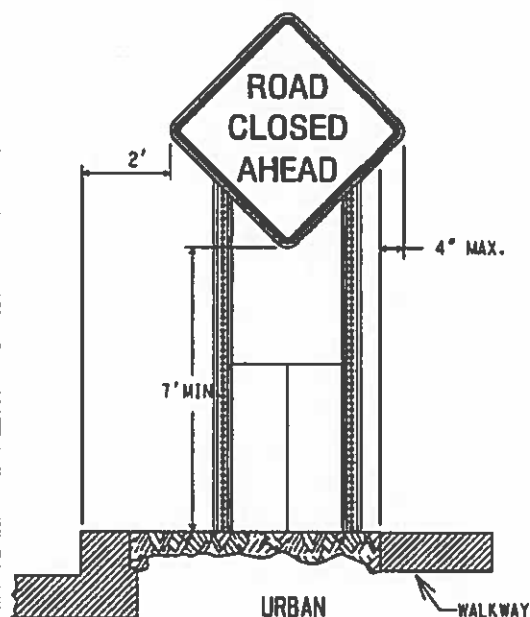
NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	PENDING FHWA APPROVAL DATE	8/2006	WZD-100-A	SHEET 2 of 11
File # W/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH	PLAN DATE			

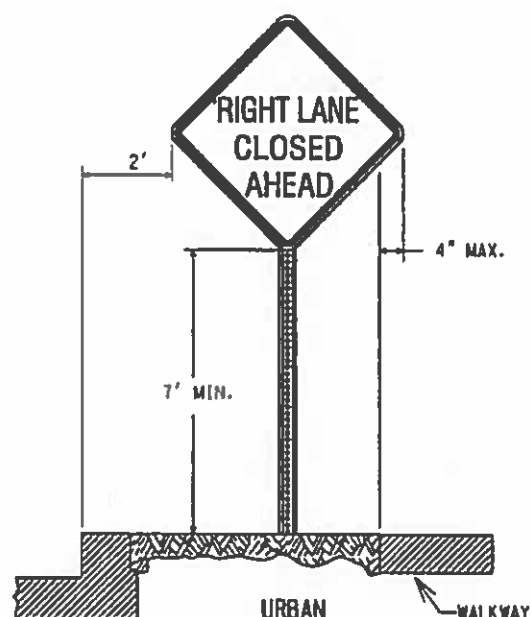
NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



RURAL

RURAL WITH ADVISORY
SPEED PLATE

URBAN

(CURBED AREAS OR WHERE
WALKWAYS ARE PRESENT)

URBAN

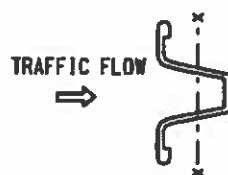
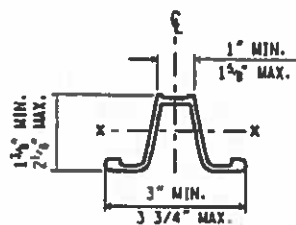
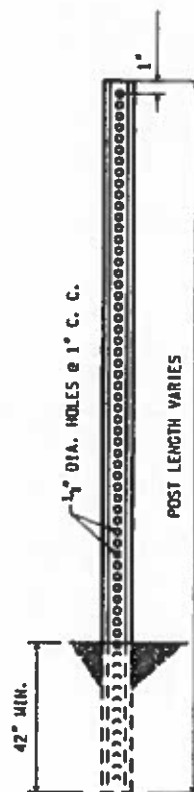
(CURBED AREAS OR WHERE
WALKWAYS ARE PRESENT)

BOTTOM HEIGHT AND OFFSET

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	PENDING FHWA APPROVAL DATE	8/2006	WZD-100-A	SHEET 3 of 11
File#M/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH	PLAN DATE			

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WEIGHT = 3 lbs/ft
 SECT. MOD. X-X. = 0.31 CUBIC INCHES MIN.

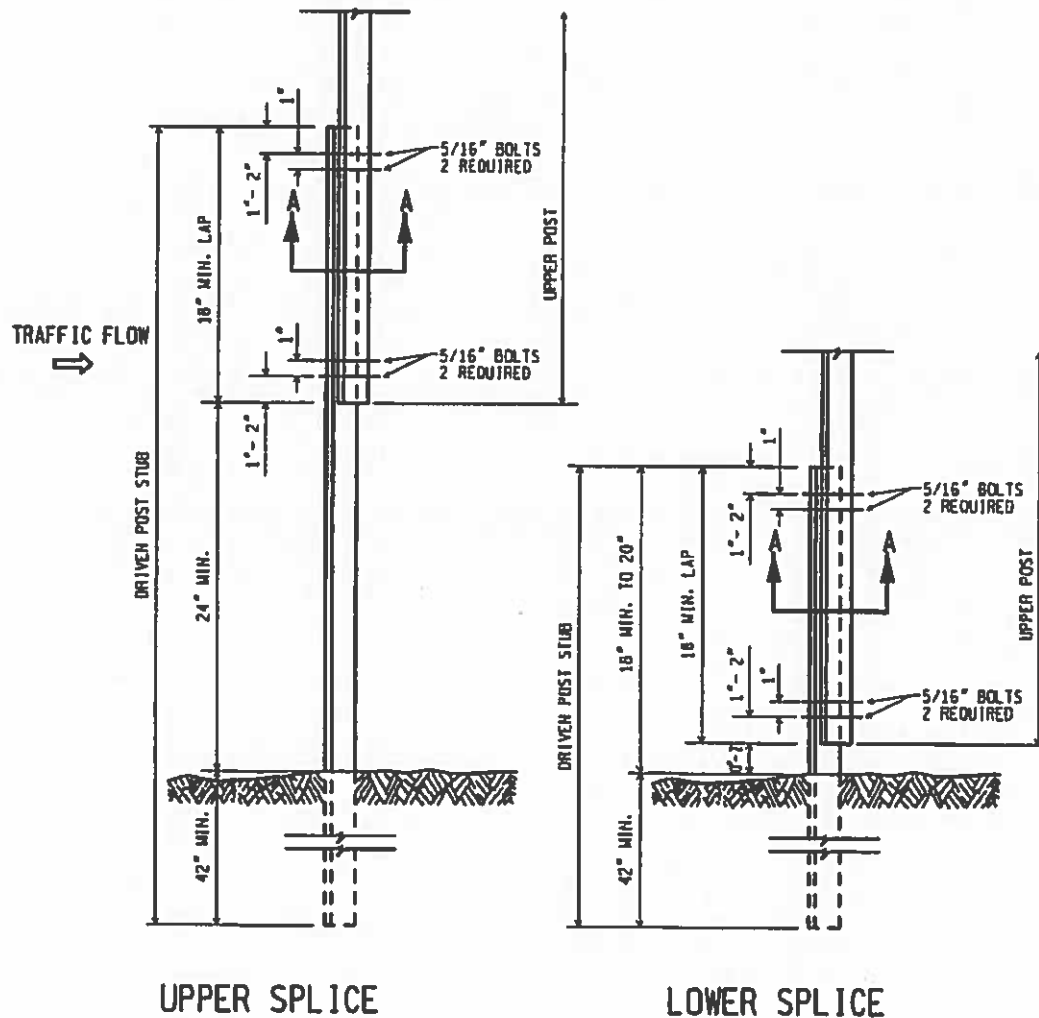
3 lb. U - CHANNEL STEEL POST (NO SPLICE)

MOUNT SIGN ON OPEN FACE OF
 U - CHANNEL STEEL POST

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	PENDING FHWA APPROVAL DATE	8/2006	WZD-100-A	SHEET 4 of 11
File:PW/Doc/RD/T&S/Typ/Dev/Sign Main/raf 0/WZD-100-A Rev. 8/21/06 ECH	PLAN DATE			

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



3 lb. U - CHANNEL STEEL POST (WITH SPLICE)

MOUNT SIGN ON OPEN FACE OF
UPPER U - CHANNEL STEEL POST

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

PENDING
FHWA APPROVAL DATE

8/2006

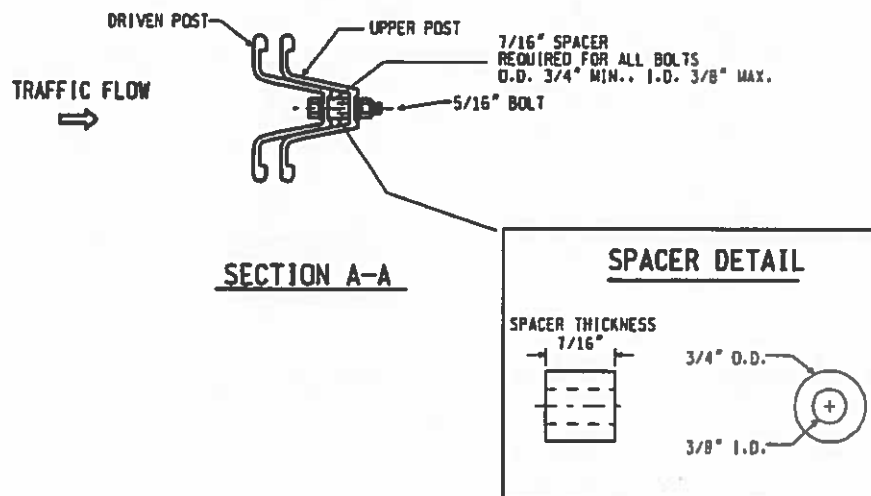
PLAN DATE

WZD-100-A

SHEET
5 of 11

File:PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

**NOTES:**

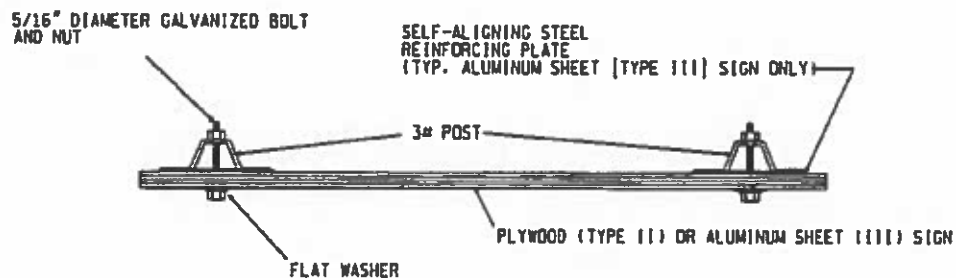
1. THE SPACER THICKNESS SHALL BE 1/16\" LESS THAN THE GAP BETWEEN THE POST WHEN POSITIONED IN THE UNBOLTED CONFIGURATION.
2. THE EXTERIOR BOLT (CLOSEST TO LAP), SPACER, WASHER, AND NUT SHALL BE INSTALLED IN A PREPUNCHED HOLE 1\" TO 2\" FROM THE END OF THE LAP.
3. THE INTERIOR BOLT (FARTHEST FROM LAP), SPACER, WASHER, AND NUT SHALL BE INSTALLED IN THE NEXT PREPUNCHED HOLE.
4. THE DRIVEN POST SHALL ALWAYS BE MOUNTED IN FRONT OF THE UPPER POST WITH RESPECT TO THE ADJACENT ONCOMING TRAFFIC, REGARDLESS OF THE DIRECTION THE SIGN IS FACING.
5. THE SPLICE LAP SHALL BE FASTENED BY FOUR-5/16\" DIA. GALVANIZED A449 BOLTS (SAE J429 GRADE 5) OR GALVANIZED A325 BOLTS.

3 lb. U - CHANNEL STEEL POST (WITH SPLICE)

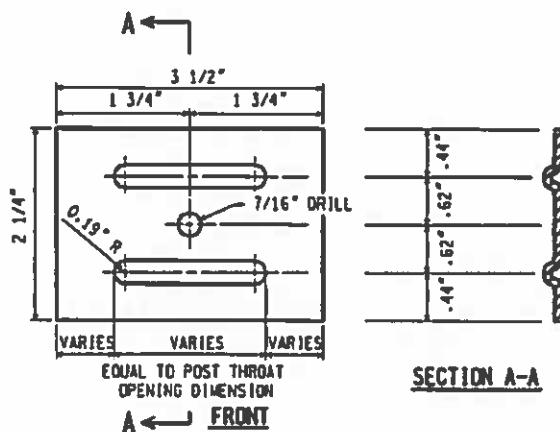
NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	PENDING FHWA APPROVAL DATE	8/2006	WZD-100-A	SHEET 6 of 11
File#PW/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH	PLAN DATE			

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



SIGN TO 3 lb. POST CONNECTION



NOTES: (FOR STEEL SIGN REINF' PLATE)

1. MATERIAL: 12 GAUGE CARBON STEEL.
2. TOLERANCE ON ALL DIMENSIONS $\pm 0.0625"$
3. FINISH—AFTER STAMPING AND PUNCHING, GALVANIZE ACCORDING TO CURRENT SPECIFICATIONS FOR ZINC (HOT GALVANIZE) COATINGS ON PRODUCTS FABRICATED FROM PLATES OR STRIPS

STEEL SIGN REINFORCING PLATE REQUIRED FOR TYPE III SIGNS ONLY

3 lb. U - CHANNEL STEEL POST SIGN CONNECTION

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN

PENDING
FHWA APPROVAL DATE

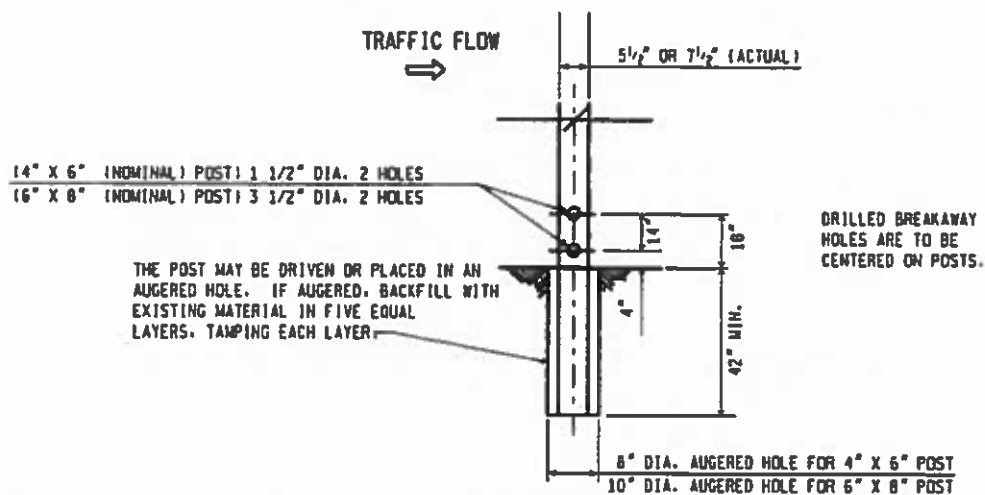
8/2006
PLAN DATE

WZD-100-A

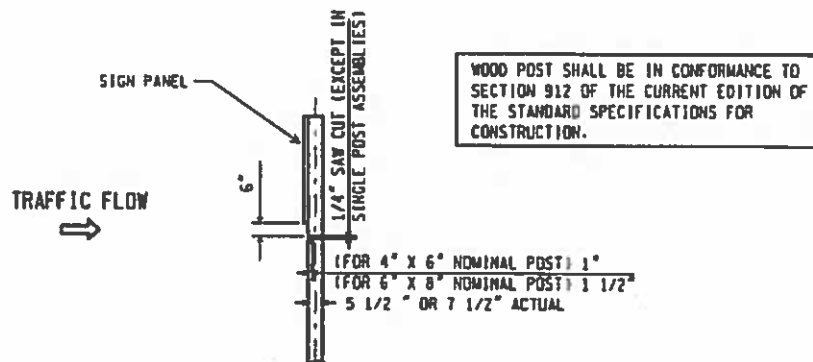
SHEET
7 of 11

File:PW/Doc/RD/T&S/Typ/Dev/Sign MainTrsf 0/WZD-100-A Rev. 8/21/06 ECH

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WOOD POST BREAKAWAY HOLES/ DIRECT EMBEDMENT DETAILS



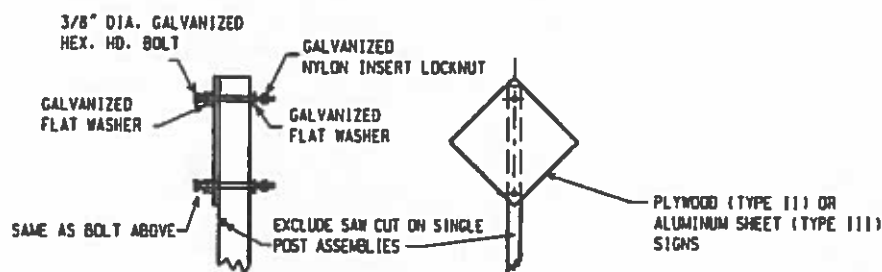
SAW CUT DETAIL (MULTIPLE POST INSTALLATIONS)

WOOD POST DETAILS

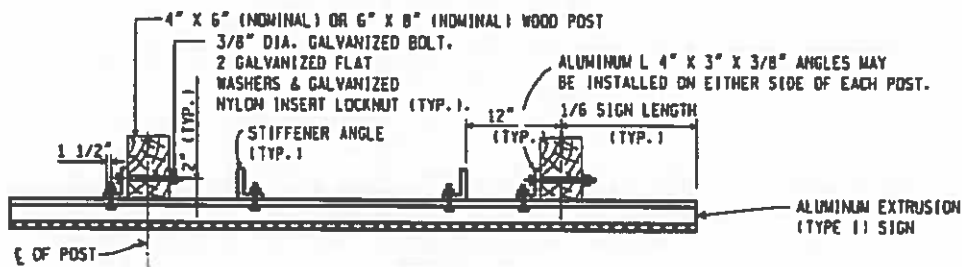
NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	PENDING FHWA APPROVAL DATE	8/2006	WZD-100-A	SHEET 8 of 11
File#W/Doc/RD/T&S/Typ/Dev/Sign MainTraf B/WZD-100-A Rev. 8/21/06 ECH	PLAN DATE			

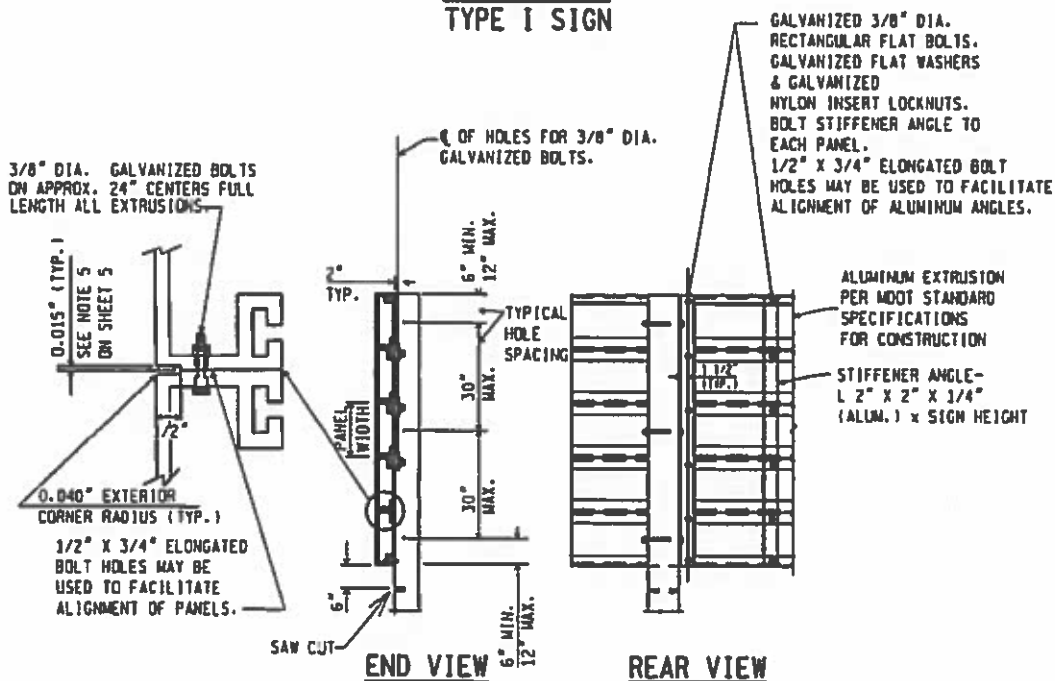
NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



TYPE II AND TYPE III SIGNS



TOP VIEW TYPE I SIGN



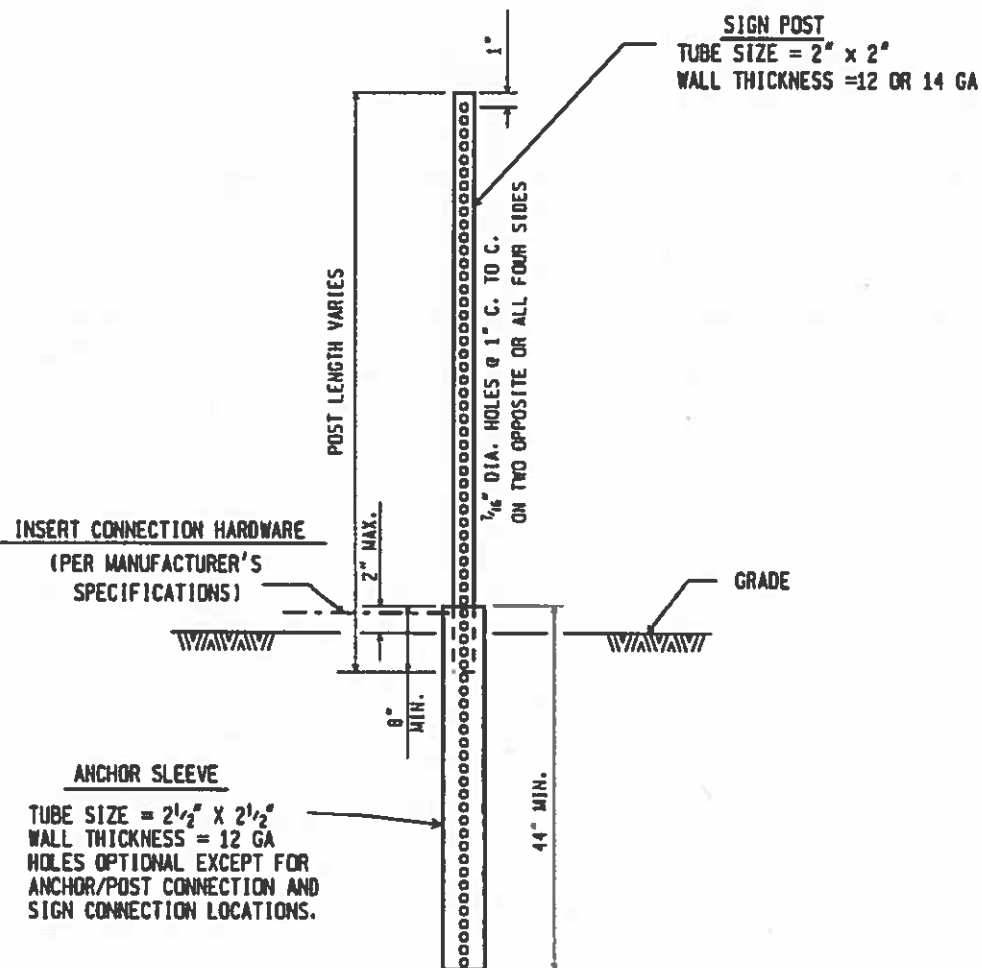
TYPE I SIGN - ERECTION DETAILS

WOOD POST CONNECTIONS

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	PENDING FHWA APPROVAL DATE	8/2006	WZD-100-A	SHEET 9 of 11
File:PM/Doc/RD/T&S/Typ/Dev/Sign MainTraf D/WZD-100-A Rev. 8/21/06 ECH	PLAN DATE			

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SQUARE TUBULAR STEEL POST

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	PENDING FHWA APPROVAL DATE	8/2006	WZD-100-A	SHEET 10 of 11
File: P:\Doc\RD\T&S\Typ\Dev\Sign Maint\raf 0\WZD-100-A Rev. 8/21/06 ECH	PLAN DATE			

NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.

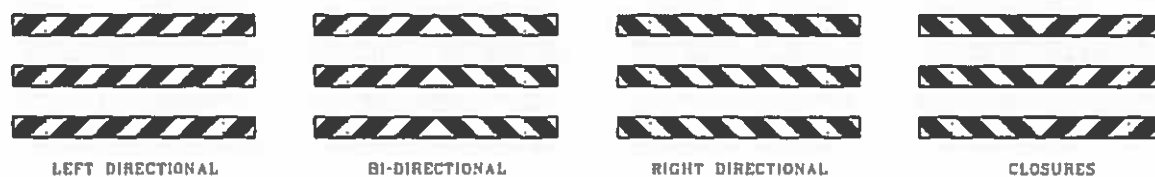
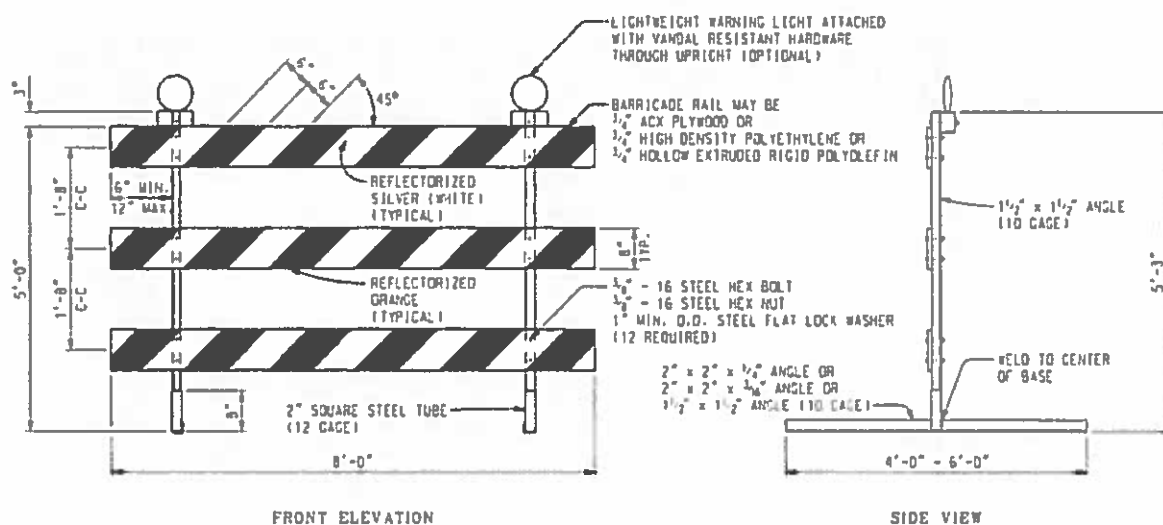
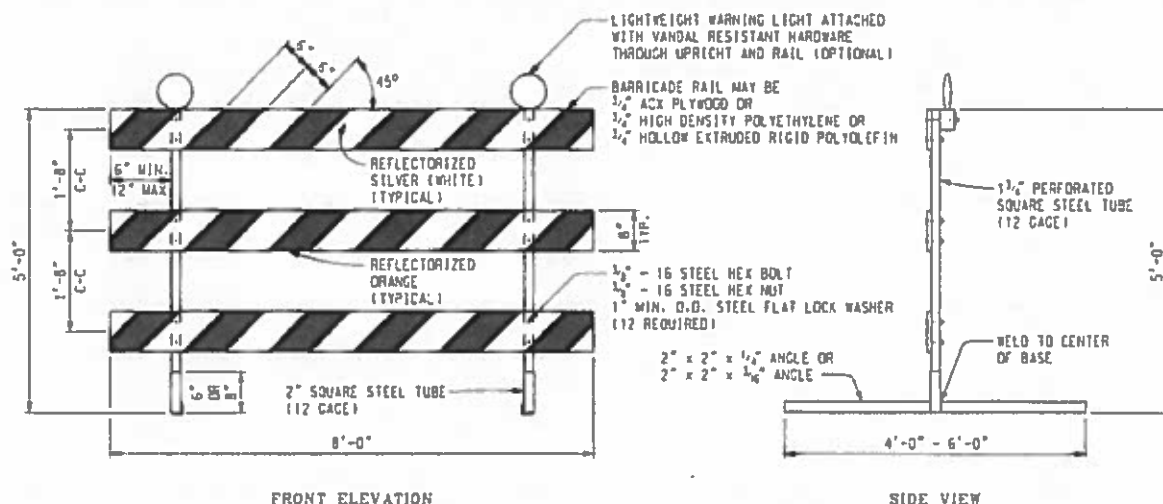
GENERAL NOTES:

1. A MAXIMUM OF TWO POSTS WITHIN A 7 FOOT PATH IS PERMITTED.
2. ALL SIGN POSTS SHALL COMPLY WITH NCHRP 350.
3. ALL POSTS SHALL BE EMBEDDED A MINIMUM OF 42".
4. BRACING OF POST IS NOT PERMITTED.
5. SIGN SHALL BE LEVEL, AND UPRIGHT FOR THE DURATION OF INSTALLATION.
6. ERECT POSTS SO THE SIGN FACE AND SUPPORTS DO NOT VARY FROM PLUMB BY MORE THAN 3/16" IN 3'. PROVIDE A CENTER-TO-CENTER DISTANCE BETWEEN POSTS WITHIN 2 PERCENT OF PLAN DISTANCE.
7. NO MORE THAN ONE SPLICE PER POST, AS SHOWN, WILL BE PERMITTED.
8. POST TYPES SHALL NOT BE MIXED WITHIN A SIGN SUPPORT INSTALLATION.
9. NO VERTICAL JOINTS ARE PERMITTED IN SIGN. NO HORIZONTAL JOINTS THROUGH SIGN LEGEND OR SYMBOLS ARE PERMITTED IN SIGN
10. REMOVE SIGN POSTS AND/OR POST STUBS IN THEIR ENTIRETY WHEN NO LONGER REQUIRED.
11. ALL LABOR, MATERIALS, AND EQUIPMENT, INCLUDING TEMPORARY SUPPORTS REQUIRED TO INSTALL, MAINTAIN, RELOCATE, COVER, AND/OR REMOVE THE TEMPORARY SIGN, INCLUDING SUPPORTS, ARE CONSIDERED TO BE INCLUDED IN THE COST OF THE TEMPORARY SIGN.
12. SAW CUTS IN WOOD POSTS ARE TO BE PARALLEL TO THE BOTTOM OF THE SIGN.
13. POSTS SHALL NOT EXTEND MORE THAN 4" ABOVE TOP OF SIGN.

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	PENDING FHWA APPROVAL DATE	8/2006	WZD-100-A	SHEET 11 of 11
File # PW/Doc/RD/T&S/Typ/Dev/Sign Maintref 0/YZD-100-A Rev. 8/21/06 ECH	PLAN DATE			

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BARRICADE RAIL SHEETING OPTIONS TYPE III BARRICADES

Other Type III Barricades meeting current NCHRP crash worthy criteria can be found on the FHWA Safety website at
http://safety.fhwa.dot.gov/roadway_dept/road_hardware/wzd.htm

NOT TO SCALE

File: T&S/Typ/Signs/WorkZones/wzd 125 d

Rev: 09/22/09 PJ



PREPARED BY
TRAFFIC AND SAFETY

DRAWN BY: ECH

CHECKED BY: MMB

ENGINEER OF DELIVERY

ENGINEER OF DEVELOPMENT

(SPECIAL DETAIL)

FHWA APPROVAL DATE

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN FOR

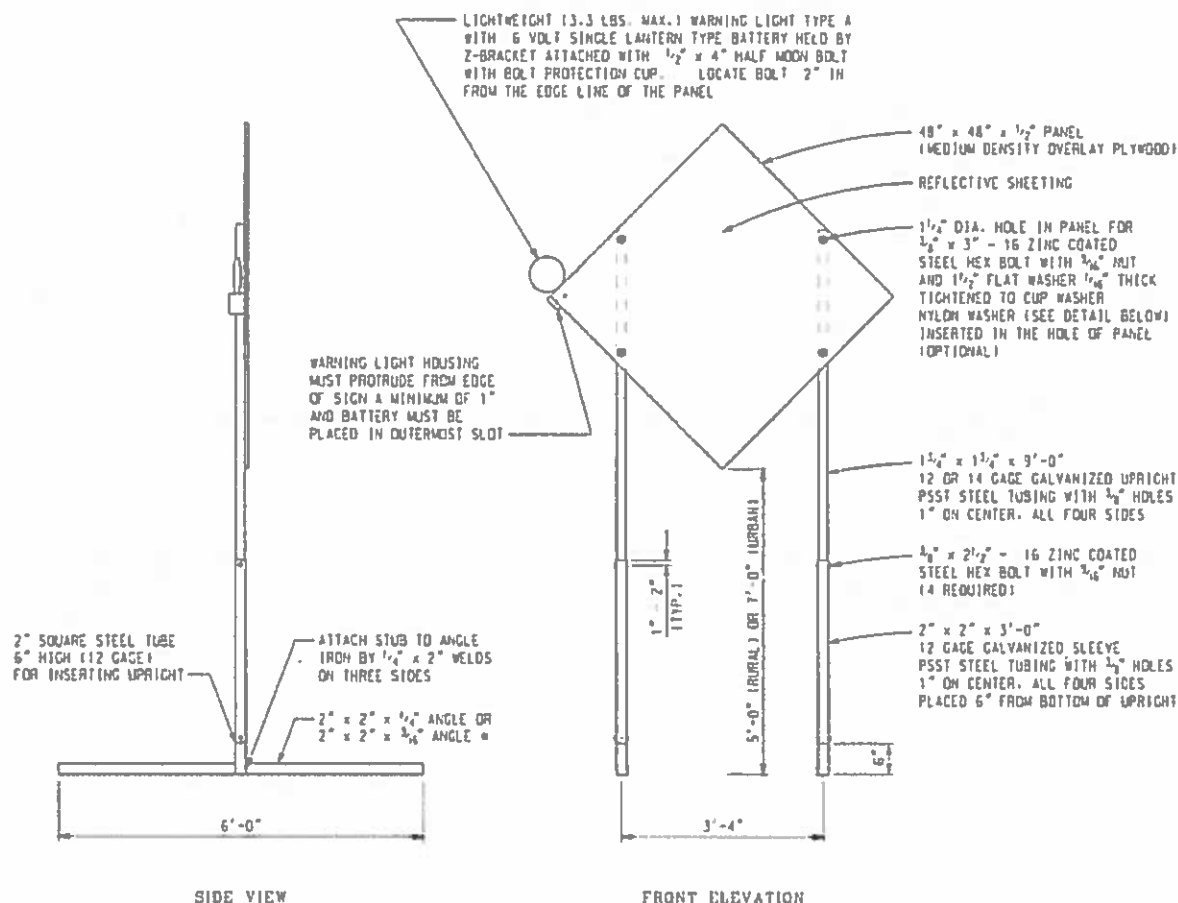
Temporary
Traffic Control Devices

9/22/09
PLAN DATE

WZD-125-E

SHEET
1 of 3

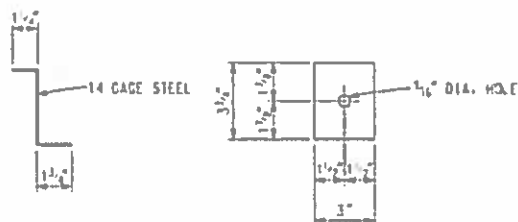
NOTE: THE ORIGINAL SIGNED COPY IS KEPT ON FILE AT THE MICHIGAN DEPARTMENT OF TRANSPORTATION.



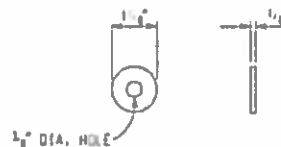
TEMPORARY SIGN SUPPORT

(WARNING LIGHT PLACED ON SIDE CLOSEST TO TRAFFIC)

- SIGN STAND IS BALLASTED WITH FOUR OR MORE 35 LB SANDBAGS. A MINIMUM OF ONE ON EACH END.
- UPRIGHTS SHALL NOT EXTEND ABOVE THE SIGN PANEL.



Z-BRACKET DETAIL



OPTIONAL NYLON WASHER

Other temporary sign supports meeting current NCHRP crash worthy criteria can be found on the FHWA Safety website at http://safety.fhwa.dot.gov/roadway_dept/road_hardware/wzd.htm

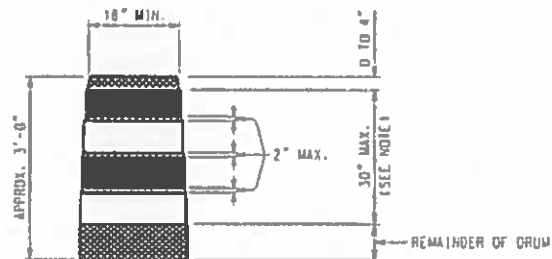
NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	(SPECIAL DETAIL) FHWA APPROVAL DATE	9/22/09	WZD-125-E	SHEET 2 of 3
File: T&S/typ/Signs/WorkZones/wzd 125 d	Rev. 09/22/09 PJ	PLAN DATE		

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SYMBOLS TO BE USED ON PLANS



NOTE:
DRUMS SHALL HAVE AT LEAST 4 HORIZONTAL REFLECTORIZED STRIPES (2 ORANGE AND 2 WHITE) OF 6" UNIFORM WIDTH, ALTERNATING IN COLOR WITH THE TOPMOST REFLECTORIZED STRIPE BEING ORANGE. NON REFLECTORIZED SPACES BETWEEN THE HORIZONTAL REFLECTORIZED ORANGE AND WHITE STRIPES SHALL BE ORANGE IN COLOR AND EQUAL IN WIDTH.

PLASTIC DRUM

NOTES:

2" PERFORATED SQUARE STEEL TUBES MAY BE USED TO FABRICATE THE HORIZONTAL BASE OF THE TYPE III BARRICADE.

WARNING LIGHTS SHALL BE PLACED ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND ALL OTHER PROVISIONS IN THE CONTRACT WHEN THEY ARE USED ON TYPE III BARRICADES.

SEE ROAD STANDARD PLANS R-113-SERIES FOR TEMPORARY CROSSTOVERS FOR DIVIDED ROADWAY, AND R-126-SERIES FOR TYPICAL LOCATION AND SPACING OF PLASTIC DRUMS FOR PLACEMENT OF TEMPORARY CONCRETE BARRIER.

SIGNS, BARRICADES, AND PLASTIC DRUMS SHALL BE FACED WITH PRESSURE-SENSITIVE REFLECTIVE SHEETING ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

SANDBAGS SHALL BE USED WHEN SUPPLEMENTAL WEIGHTS ARE REQUIRED TO ACHIEVE STABILITY OF THE BARRICADE. THE SANDBAGS SHALL BE PLACED SO THEY WILL NOT COVER OR OBSTRUCT ANY REFLECTIVE PORTION OF THE TRAFFIC CONTROL DEVICE.

NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS DELIVERY STANDARD PLAN	(SPECIAL DETAIL) FHWA APPROVAL DATE	9/22/09	WZD-125-E	SHEET 3 of 3
File: T&S/Typ/Signs/WorkZones/wzd 125 d	Rev. 09/22/09 PJ	PLAN DATE		

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CITY OF DETROIT
SPECIAL PROVISION
FOR
UTILITY ACCESS & CROSSING,
RECLAIMED MATERIAL, MISC. MATERIAL REMOVAL,
HYDRANT USE, DEWATERING EXCAVATED AREAS,
MONUMENT DISTURBANCE, & WORK AREA CLEANLINESS

1 of 3

DET: NYS

Revised: 03-06-15

UTILITY ACCESS

The contractor shall contact the utility owners, including the Detroit Fire and Police Departments regarding their facilities prior to starting the work. All utilities outlets and control fixtures shall be maintained in an accessible condition at all times.

ADJACENT UTILITIES

When proposed utilities cross or lay parallel to an existing or proposed utility, a vertical clearance of 12 inches and horizontal clearance of 42 inches shall be provided between the outside limits of their construction and the outside limits of the Public Lighting Department (PLD) or Detroit Water and Sewerage Department (DWSD) facility. PLD facilities include electrical conduits, communication conduits, and related structures. DWSD facilities include sewers, water mains, and related structures. If for any reason this clearance cannot be provided, the contractor shall notify the project engineer and proceed under his direction in an approved manner.

RECLAIMING SALVAGABLE MATERIAL

All salvageable material within the limits of this project and belonging to either privately or municipally owned utilities, which are to be reclaimed by its owner, will be indicated on the plans or in the proposal. The removal of such material shall be done by the owner and at their own expense and at such time as will cause no delay to the Contractor. If after due notice the owner does not remove the material, the Engineer shall advise the Contractor to remove the material and this material shall become the property of the Contractor. The work of removing the material is included in the construction of the project and will not be paid for separately.

HYDRANTS AND WATER

The Contractor shall pump out at the end of each day throughout the year, regardless of the season, any fire hydrant used to obtain water.

The Contractor shall secure the required permit from the Detroit Fire Department and the Detroit Water and Sewerage Department, and shall bear all the expense for such permits and for the water used. If connections are made to hydrants, Fire Department's standard hydrant wrench shall be used for the operation of the hydrant.

HYDRANTS AND WATER (continued)

The Fire Department requires a fee deposit of \$200 and a fee of \$40/day for hydrant usage. These rates may change. Contact the Fire Department for information at (313) 596-2975.

The DWSD charges a variable rate. Contact DWSD for rate information at (313) 245-1057.

USE OF BALL TYPE PAVEMENT BREAKER FOR REMOVAL OF MISCELLANEOUS STRUCTURES

The use of a crane and ball type pavement breaker for the removal of miscellaneous structures referred to in Section 204 of the 2012 Standard Specifications and the removal of other items called for in these Supplemental Specifications will **NOT** be permitted at any time for work under this Contract, except when specifically authorized by the Engineer.

PUMPING AND DRAINAGE

The Contractor will be required to furnish all equipment and supplies and perform all labor necessary to keep all excavated areas dewatered during the period of his contract.

The work will include the disposal of all drainage water flowing into the excavation. The drainage of the entire project shall be disposed of in a manner that will not interfere with or delay the work of others. This work shall be performed as directed by the Engineer.

The City will permit, subject to its approval, drainage water from the excavations for the project to enter existing operating sewers without reimbursement. No claims for damages, however, will be allowed the Contractor because of the inadequacy of the City sewers to accommodate the water from the excavations.

All sewers and drainage structures shall be kept thoroughly cleaned of silt, debris and foreign matter, and shall be free from such accumulation at the time of final inspection.

The work of pumping and cleaning the structures specified will be considered included to the construction of the project and no additional payment will be made therefor.

PROPERTY AND SURVEY MONUMENTS

Before any monuments or stakes marking the boundaries of property along or near the work are removed or disturbed, the Contractor shall notify the Engineer in sufficient time so that they can be properly located and reset.

All precautions shall be taken to avoid disturbance of permanent survey monuments of any City, County or State authority, and when any of these are disturbed or destroyed, the Contractor shall restore them to the satisfaction of such authority and shall pay all costs incurred by such authority in connection therewith.

CLEANLINESS OF THE WORK

The Contractor shall at all times keep the street pavement and right-of-way and any public or private premises temporarily occupied by him for purposes of work under this contract free from accumulations of waste material or rubbish caused by his employees or the work. The requirement shall apply to any streets in vicinity of the work which are affected by the Contractor's construction or hauling operations, as well as to streets in which the work is located. If the Contractor shall fail to keep any street cleaned of debris resulting from his operations, and therefore shall create any public nuisance, he shall be notified in writing by the Engineer to clean the street and remove the nuisance immediately. If, within 24 hours after the receipt of such notice, the contractor shall fail to clean such street satisfactorily, the Engineer shall order the street cleaned by the Department of Public Works or such other agency as he shall designate and all costs of such cleaning shall be paid by the Contractor.

Materials and equipment not in current use shall not be stored on any city streets. Storage of materials on private property shall require a written agreement with the owner. The Contractor shall provide the Engineer a copy of the agreement.

CITY OF DETROIT
SPECIAL PROVISION
FOR
LIMITATIONS OF OPERATIONS
AND
ANTI-NOISE CONTROL

1 of 1

DET: UP

Revised: 05-12-12

The following paragraphs shall be added to Subsection 108.02 Limitation of Operation of the 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction.

Overtime shall be limited to the work days submitted on the progress schedule for the project. The work days used to develop the progress schedule shall be Monday through Saturday and shall not include Sundays and City Holidays. Overtime work on Sundays and City Holidays shall be limited to emergency work necessary to safeguard the health and safety of the public.

The following are the current City Holidays: New Year's Day, Martin Luther King Jr. Birthday, Good Friday, Memorial Day, Independence Day, Labor Day, Election Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve, Christmas Day, New Year's Eve and New Year's Day. The Contractor shall be responsible for confirming with the City Engineering Division, Coleman A. Young Municipal Center, 2 Woodward Avenue - Suite 601, any amendments to this list of calendar dates designated as holidays for City of Detroit employees.

The Engineer may require the contractor to cease construction operations during times as may be determined to be in the interest of the public at no additional compensation or cost to the City.

Contractor shall suspend or limit their operations if work interfere with the City sponsored public events within project CIA (Construction Influence Area) at no additional compensation or cost to the City.

The Contractor may normally prosecute the work during the entire twenty-four (24) hours of any work day stated above, provided that he so conducts his operations as not to create a public nuisance nor disturb the peace. Operations outside normal working hours must be conducted in accordance with Local Ordinances, as outlined in Subsection 107.01 of the 2012 MDOT Standard Specifications for Construction.

CITY OF DETROIT
SPECIAL PROVISION
FOR
WORKING AREA AND PROJECT CLEANUP

1 of 1

Revised: 3-22-2006

All the work under this Contract shall be in City streets, alleys, easements, or rights-of-way, and the space allowed for the Contractor's operations shall be in City streets and alleys adjacent to his work. Construction equipment, storage of materials, and the construction operations shall normally be restricted to such areas. Should additional working or storage space be desired, the Contractor may be permitted to utilize adjacent private property provided he makes all arrangements with the owners, bears all expense in connection with its use, and in no way involves or obligates the City or State by such use.

Materials delivered on the street shall be neatly and compactly piled in such manner as to cause the least inconvenience to adjacent property owners and the general public.

Working areas shall be promptly restored to their original condition as soon as the required construction work has been completed at the particular location, and shall not be used as a storage area for unneeded material or construction equipment.

The work and all property used in connection with the work shall be kept in a neat and orderly condition at all times. Waste material and refuse from the Contractor's operations may be temporarily piled behind the curb in a manner not to interfere with pedestrians. Waste materials, rubbish, and debris shall not be allowed to accumulate and shall be removed daily, as directed by the Engineer. Construction equipment and excess materials shall be promptly removed from the site as they become no longer needed for the progress of the work.

All cost relating to maintaining a neat working area and providing the required cleanup will not be paid for separately but shall be included in the total project cost.

CITY OF DETROIT
SPECIAL PROVISION
FOR
COORDINATION CLAUSE FOR HMA RESURFACING
AND
MISCELLANEOUS CONSTRUCTION

1 of 1

DET:

Revised: 01-31-12

The Contractor shall coordinate his operations with others performing work within, or adjacent to, the Construction Influence Area (CIA), to avoid conflicts in maintaining traffic, construction signing, and progression of construction activities.

The Contractor's attention is called to the requirements of cooperation with others as covered in Subsection 104.08 of the 2012 Michigan Department of Transportation Standard Specifications for Construction.

The Contractor will be required to coordinate his work with the curb-side garbage pick-up within the Construction Influence Area.

No claim for extra compensation or adjustments in contract unit prices will be allowed on account of delay or failure of others to complete work units scheduled.

CITY OF DETROIT
NOTICE TO BIDDER
FOR
UTILITY COORDINATION

Page 1 of 3

DET:

Revised: 01-22-2015

The contractor shall cooperate and coordinate construction activities with the owners of utilities as stated in Section 104.08 of the 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction. In addition, for the protection of underground utilities, the contractor shall follow the requirements in Section 107.12 of the 2012 MDOT Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon Section 108.08 of the 2012 MDOT Standard Specifications for Construction.

The existing utilities listed below and shown on the plans represent the best information available as obtained on our surveys.

This information does not relieve the Contractor of the responsibility to satisfy himself as to its accuracy, or of his responsibility in case utilities have been constructed or removed since the most recent surveys.

NAME AND ADDRESS OF OWNER

KIND OF UTILITY

Miss Dig

Call three (3) working days before you dig
 1-800-482-7171

All Underground Utilities

City of Detroit

Public Lighting Department

9449 Grinnell

Detroit, MI 48213

Ashok Pinamaneni

(313) 267-7210

Fax

(313) 267-8153

Email: AshokP@PLDgm.ci.detroit.mi.us

Emergency 24 Hour service (313) 224-0500

Carolyn Davis

(313) 267-7270

Street Lighting and Traffic Signals

City of Detroit

Detroit Water & Sewerage Department

735 Randolph Street

Detroit, MI 48226

General

(313) 267-8000

Emergency

(313) 267-7401

Water Mains & Sewers

DET:

Revised: 01-22-2015

NAME AND ADDRESS OF OWNER**KIND OF UTILITY**

City of Detroit
Traffic Engineering, D.P.W.
 2633 Michigan Avenue
 Detroit, MI 48207
 Sunny Jacobs (313) 833-7789
 Email: sunjac@detroitmi.gov

Pavement Markings, Signs & Traffic Signals

Jubi Chackunkal (313) 224-1315
 Jubcha@detroitmi.gov

Prasad Nannapaneni (313) 628-5603
 prasadn@detroitmi.gov

Sign Shop
 2425 Fenkell
 Detroit, MI 48238
 Willie Riley (313) 628-2923
 Fax (313) 628-4966

Sign Removals & Installations

City of Detroit
Detroit Fire Department
 250 W. Larned
 Detroit, MI 48226
 Chief Derek Segars (313) 224-1311
 Fax (313) 224-1908

Fire Call Boxes and Fire Hydrants

City of Detroit
Detroit Police Department
 1300 Beaubien
 Detroit, MI 48226
 (313) 224-4400

Police Call Boxes

DTE, Detroit Edison
 One Energy Plaza
 IGS Group, 518SB
 Detroit, MI 48226
 Robin O'Connell (313) 235-5632
 Fax (313) 235-9366
 (313) 237-9564

Electric Power

Exposed or Damaged Facilities

DET:

Revised: 01-22-2015

NAME AND ADDRESS OF OWNER**KIND OF UTILITY**

DTE, Michigan Consolidated Gas Company
Data Integrity, 2nd floor
3200 Hobson
Detroit, MI 48201
Barbara Saunders (313) 577-7435
Fax (313) 577-7498
1-800-477-4747

Gas Main

Exposed or Damaged Facilities

AT&T
Metro East
100 S Main St, Suite 314
Mt Clemens, MI 48043-2374
Joe Sikoski (586) 466-6310

Telephone

Metro West
31100 Plymouth Rd, Room 301
Livonia, MI 48150-2104
John Crispin (734) 523-6880

For adjusting Frames and Covers

Detroit Thermal LLC
3575 E Palmer St
Detroit, MI 48201
Ed LaRosa (313) 921-1922
Fax (313) 921-1972

Steam Lines

Comcast Cablevision
25626 Telegraph Rd
Southfield, MI 48034
Glen Younglove (248) 809-2712
Fax (248) 809-2721
Glen_Younglove@cable.comcast.com

TV Cables

AT&T will require five to seven business days advance notice prior to adjusting frames and covers.

Contact DTE ten (10) working days prior to the construction start date to coordinate adjustments for Detroit Edison manholes.

CITY OF DETROIT
SPECIAL PROVISION
FOR
HMA APPLICATION ESTIMATE

1 of 1

DET: UP

Revised: 05-12-12

The HMA Top Surfacing Mixture 5E3 shall have a yield of 165 pounds per square yard with an estimated thickness of 1.5 inches.

The HMA Leveling Surfacing Mixture 4E3 shall have a yield of 220 pounds per square yard with an estimated thickness of 2 inches.

Performance Grade; PG 64-22

The Material for HMA Approach, Modified shall be HMA Mixture 1.5 inches of 5E3 and 2 inches of 4E3, having a yield of 385 pounds per square yard.

The Material for Hand Patching shall be 3 inches minimum of HMA Mixture 5E3, having a yield of 330 pounds per square yard (or as directed by the Engineer).

HMA Shoulder, Modified shall be HMA Mixture 3 inches of 5E3, having a yield of 330 pounds per square yard. The material shall be placed in two lifts of approximately 1.5 inches.

HMA Prime Coat and HMA Bond Coat shall be included in the HMA pay item and shall meet the requirements specified in Section 904 of the 2012 MDOT Standard Specifications for construction.

The aggregate wear index shall be 260.

CITY OF DETROIT
SPECIAL PROVISION
FOR
HMA CONCRETE PAVEMENT
SEQUENCE OF OPERATIONS

1 of 1

DET: UP

Revised: 05-12-12

Once work on a street is begun, the Contractor shall maintain a continuous operation. Top Course HMA shall be placed only after all base repairs, concrete curb removal and replacement, structure adjustment and repairs are completed. All milled pavement surfaces shall be completely resurfaced with leveling and top courses before the seasonal shutdown for the winter. All milled surfaces shall be completely resurfaced with leveling course as soon as possible but not to exceed 48 hours from the milling unless specifically approved otherwise by the Engineer.

CITY OF DETROIT
SPECIAL PROVISIONS
FOR
COLD MILLING HMA SURFACE, MODIFIED

1 of 1

DET: UP

Revised: 05-08-12

Description This work shall consist of removing HMA pavement or surface by use of cold-milling equipment to prepare the foundation for HMA overlays per section 501.03 of the 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction and as specified herein.

The cost of exploration for the existing street car rails when encountered during cold milling shall be included in the work of cold milling HMA surface. Extra payment for cost of actual removal and disposal of any street car rail will be made per section 103.02

The Contractor shall schedule the cold-milling operation so that entire lane width of the roadway is cold milled between road terminus limit before switching over to other lane/side. This is required to avoid having a vehicle travel over milled surface on one side and normal pavement surface other side.

At the end of the day, the Contractor shall place a wedge, a minimum of 6 feet wide, the full length of all transverse and longitudinal joints at intersections where milling is greater than 2 inches in depth, to provide a smooth transition onto and off of the milled surface.

It is the Contractor's responsibility to establish the finish (final) grade on all streets and to ensure proper (positive) drainage at all locations. This work shall included in the work of cold milling and be done at no additional cost to project.

Measurement and Payment The completed work as measured for "Cold Milling HMA Surface, Modified" will be paid for at the contract unit price for the following contract pay item.

Cold milling of existing concrete patches, and establishing finish (final) grade to ensure proper drainage, the cost of exploration for an existing street car rail when encountered during cold milling and wedging for longitudinal and transverse transition when required is included in the work of "Cold Milling HMA Surface, Modified".

The price shall be payment in full for removing the HMA material to the depth specified on the typical cross section sheet, and for transportation and disposal of the material.

Pay Item

Pay Unit

Cold Milling HMA Surface, Modified

Square Yard

CITY OF DETROIT
SPECIAL PROVISION
FOR
CONDITIONING EXISTING PAVEMENT, MODIFIED
1 of 1

DET: MCS

Revised: 02-09-12

Description. This work shall be in accordance with Subsection 501.03.C of the 2012 Michigan Department of Transportation Standard Specifications for Construction except the HMA Patches, Joint and Crack, Cleanout, and Pavement Joint and Crack Repair, Detail 7 shall not be separate pay items but shall be included in the work of "Conditioning Existing Pavement, Modified" and will be done as directed by the Engineer.

Measurement and Payment. "Conditioning Existing Pavement, Modified" will be measured and paid for by the ton of HMA material placed. The contract price per ton will be payment in full for furnishing all labor, material and equipment required to remove deteriorated or unstable material to clean the pavement surface and apply any bonding material needed and to furnish, place and compact the HMA mixture to prepare the existing pavement for surfacing. HMA Patch, Remove; Joint and Crack, Cleanout; and Pavement Joint and Crack, Repair ,Detail 7 will not be paid for separately but are included in the item of work "Conditioning Existing Pavement, Modified".

Full depth Pavement Joint and Crack Repair, Detail 8 is not included in the item of "Conditioning Existing Pavement, Modified".

Pay Item
Conditioning Existing Pavement, Modified

Pay Unit
Ton

CITY OF DETROIT
SPECIAL PROVISIONS
FOR
HMA APPROACH, MODIFIED

1 of 1

DET: MCS

Revised: 01-27-12

Description. "HMA Approach, Modified" shall conform to the requirements of Section 501 of the 2012 Michigan Department of Transportation Standard Specifications for Construction. The work shall include the construction of Butt Joints when meeting existing pavements and will not be paid for separately. The depth of the Butt Joints shall be as directed by the Engineer.

Materials. The HMA mixture for the HMA Approach shall be that specified in the Special Provision for HMA Application Estimate. The HMA mixture to be used for the Butt Joint shall be that used for the leveling HMA mixture as specified in the Special Provision for HMA Application Estimate.

Measurement and Payment. "HMA Approach, Modified" will be measured per ton. The contract unit price shall include all labor, material and equipment necessary to furnish, place and compact the HMA Approach, Modified as shown on the plans or as directed by the Engineer.

Pay Item

HMA Approach, Modified

Pay Unit

Ton

CITY OF DETROIT
SPECIAL PROVISIONS
FOR
HMA SHOULDER, MODIFIED

1 of 1

DET: UP

Revised: 02-14-2014

Description. The work shall include the removal of the existing surface required to place the shoulder or driveway as directed by the Engineer as well as furnishing and compacting the HMA shoulder or driveway material.

"HMA Shoulder, Modified" shall conform to the requirements of Section 501 of the 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction.

Measurement and Payment. "HMA Shoulder, Modified" will be measured in ton. The contract unit price shall include all labor, material and equipment necessary to remove the existing surface and furnish, place, and compact the HMA shoulder or driveway as shown on the plans or as directed by the Engineer.

Pay Item

Pay Unit

HMA Shoulder, Modified

Ton

12SP501(J)

**MICHIGAN
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION
FOR
ACCEPTANCE OF HMA MIXTURE ON LOCAL AGENCY PROJECTS**

C&T:JWB

1 of 2

C&T:APPR:JWB:JAR:07-27-04
FHWA:CON. APPR:06-06-11

a. Description. This special provision provides acceptance testing requirements for use on local agency projects that do not include the quality control/quality assurance special provision. The HMA mixture provided must meet the requirements of the standard specifications, except where modified herein.

b. Materials. Provide a mixture of aggregates, mineral filler (if required), and asphalt binder proportioned to be within the master gradation limits shown in the project documents, and meeting the uniformity tolerances listed in Table 1. The master gradation range is to be used for establishing mix design only. Topsoil, clay, or loam can not be added to aggregates which are to be used in plant mixed HMA mixtures.

c. Construction. After the job-mix-formula (JMF) is established, the aggregate gradation and the binder content of the HMA mixture furnished for the work must be maintained within the Range 1 uniformity tolerance limits permitted for the JMF specified in Table 1. However, if deviations are predominantly either below or above the JMF, the Engineer may order alterations in the plant to bring the mixture to the JMF. If two consecutive aggregate gradations on one sieve, or binder contents as determined by the field tests, are outside Range 1 but within Range 2 tolerance limits, the Contractor must suspend all operations. Contract time will continue during these times when the plant is down. Before resuming any production, the Contractor must propose, for the Engineer's approval, all necessary alterations to the materials or plant so that the JMF can be maintained. The Engineer will evaluate the alterations for their effects on AWI and mix design properties and will approve or disapprove the alterations.

The Engineer will perform acceptance sampling and testing. Each day of production, a minimum of two samples will be obtained for each mix type. Acceptance testing will be performed at the frequency specified by the Engineer. No less than three samples will be obtained for each mix type. Quality control measures to insure job control are the responsibility of the Contractor.

The crushed particle content of the aggregate used in the HMA mixture must not be more than 10 percentage points above or below the crushed particle content used in the JMF nor less than the minimum specified for the aggregate in the contract.

Establish a rolling pattern that will achieve the required in place density. The Engineer will measure pavement density with a Nuclear Density Gauge using the Gmm from the JMF for the density control target. The required in place density of the HMA mixture must be 92.0 to 96.0 percent of the density control target.

C&T:JWB

2 of 2

12SP501(J)
07-27-04**Table 1: Uniformity Tolerance Limits for HMA Mixtures**

PARAMETER	TOP & LEVELING COURSE		BASE COURSE	
	Range 1(a)	Range 2	Range 1(a)	Range 2
Binder Content	± 0.40	± 0.50	± 0.40	± 0.50
% Passing # 8 and Larger Sieves	± 5.0	± 8.0	± 7.0	± 9.0
% Passing # 30 Sieve	± 4.0	± 6.0	± 6.0	± 9.0
% Passing # 200 Sieve	± 1.0	± 2.0	± 2.0	± 3.0
a. This range allows for normal mixture and testing variations. The mixture must be proportioned to test as closely as possible to the Job-Mix-Formula.				

d. **Rejected Mixtures.** If for any one mixture, two consecutive aggregate gradations on one sieve or binder contents as determined by field tests exceed the uniformity tolerance of Range 2 under Table 1, or do not meet the minimum requirements for crushed particle content specified in the project documents, the mixture will be rejected. If such mixtures are placed in a pavement, the remaining portions of the failing field samples (split sample) will be sent to the MDOT Central Laboratory to confirm the field test results. If the Laboratory's results do not confirm the field test results and there are no price adjustments required due to test failures on the asphalt binder, then no price adjustments will be made for the mixture involved. If the Laboratory's results confirm the field test results and if, in the Engineer's judgment, the defective mixture can remain in place and there are no price adjustments required due to test failures on the asphalt binder, the contract unit price for the defective mixture involved, as determined from field tests, will be decreased on the following basis:

The contract unit price for material outside of Range 2 or with a crushed particle content below that specified in the project documents will be decreased 25 percent.

If three consecutive aggregate gradations on one sieve, or bitumen contents as determined by field tests are outside Range 1 but within Range 2 tolerance limits, the mixture produced from the time the third sample was taken until the gradation, or bitumen content is corrected back into Range 1 will be decreased in contract unit price by 10 percent. Field tests indicating that mixtures are subject to the 10 percent penalty will be confirmed in the same manner as mixtures subject to the 25 percent penalty as described herein.

CITY OF DETROIT
SPECIAL PROVISION
FOR
CURB, REM, MODIFIED

1 of 1

DET: UP

Revised: 02-14-2014

Description. The work shall be done in accordance with the applicable provisions of Section 204 of the 2012 MDOT Standard Specifications for Construction except as modified herein.

This work consists of removing curb, whether separate or integral with the pavement where the adjoining pavement remains. Where the curb is integral with the pavement, saw cutting of the existing pavement 2 feet from face of curb will be required. Saw cutting and removal of pavement integral with the curb that is required to be removed, are included into the curb removal and will not be paid for separately. Removing curb shall also include earth excavation required for removing the existing curb.

When an existing stone curb is removed, the removal shall also include the concrete backing located behind the curb and/or the concrete base on which the stone curb rests. Removal of this concrete is included in the curb removal and will not be paid for separately.

Backfill base material removed with the concrete curb with Granular Material, Class II to level necessary for new curb. Any pavement area removed shall be backfilled with aggregate to level necessary for new pavement. Backfill other areas around curb with sound earth or material excavated from site only if approved by the Engineer. Place backfill in no more than 6 inches layer and compact to at least 95 percent of maximum unit weight. The cost of all backfill material, Granular Material Class II, aggregate or sound earth or any other approved material is included in the unit price of related pay items for new curb new and will not be paid separately.

Selected excavated material, suitable for backfill, will be free from rubbish or debris, organic matter, large stones, concrete fragments, or other road material, lumber, tree roots, or branches. In general, selected excavated material to be suitable for backfill will be restricted to sand or crumbly clay. Blue clay is not considered a suitable backfill material. If there is not sufficient selected excavated material on the project, the contractor shall provide the needed fill material and no additional payment will be made for providing this backfill.

Lawn sprinkler systems, if encountered, shall be protected by the Contractor at no extra cost. If lawn sprinkler system is broken or cut, the contractor shall stake the end of the lawn sprinkler pipe and repair such damage at no cost to the city.

Measurement and Payment. The completed work as measured for "Curb, Rem, Modified" will be paid for at the contract unit price for the following item

<u>Pay Item</u>	<u>Unit</u>
Curb, Rem, Modified	Foot

CITY OF DETROIT
SPECIAL PROVISION
FOR
CURB, CONC, DETAIL CD, MODIFIED

1 of 1

DET: UP

Revised: 01-13-12

Description. The work consists of constructing curb in accordance with Section 802 of the 2012 Michigan Department of Transportation Standard Specifications for Construction except as modified herein.

Construction.

1. Construct a separate type curb per MDOT Standard Plan R-30, Detail E when the existing curb is not integral with sidewalk except that match existing curb depth, top curve radius (usually 1"R), batter (usually 1") and no lane ties are required, and
2. Construct a curb with integral sidewalk when the existing curb is integral with sidewalk. Saw cut the existing integral sidewalk 2 feet from the face for curb. Construct new curb with 2 feet integral walk. Provide 1" expansion joint in the sidewalk at 2 feet from the curb. The remaining sidewalk may or may not be replaced.

Restore areas disturbed, to their original condition. Existing berm areas shall be restored with like replacement. No separate payment will be made for such restoration but is considered part of work item.

Protect lawn sprinkler systems, if encountered. All costs associated with the lawn sprinkler protection, restoration and repair, if damaged, will be borne by the Contractor and no separate payment will be made.

Measurement and Payment. The completed work as described herein for concrete curb, which includes a separate curb or a curb with integral sidewalk, will be measured by the foot. The contract unit price will be payment in full for furnishing all materials, labor and equipment necessary to construct the curb.

Pay Item

Curb, Conc, Detail CD, Modified

Pay Unit

Foot

CITY OF DETROIT
SPECIAL PROVISION
FOR
INTEGRAL CURB AND SIDEWALK, 2 FEET, REM, MODIFIED

1 of 1

DET: NYS

Revised: 06-09-15

The work shall be done in accordance with Section 204 of the 2012 Michigan Department of Transportation Standard Specifications for construction and as specified herein.

This work shall consist of removing existing curb that has integral sidewalk as part of the curb structure. Saw cut existing sidewalk at 2 feet distance from the back of curb if there does not exist any joint within approximate five (5) feet distance from curb to remove curb and integral sidewalk. Removing curb and sidewalk shall also include earth excavation required for removing the existing curb and sidewalk. Any additional sidewalk to be removed will be paid for as Sidewalk, Rem.

Backfill base material removed with the concrete curb with Granular Material, Class II to level necessary for new curb. Any pavement area removed shall be backfilled with aggregate to level necessary for new pavement. Backfill other areas around curb with sound earth or material excavated from site only if approved by the Engineer. Place backfill in no more than 6 inches layer and compact to at least 95 percent of maximum unit weight. The cost of all backfill material, Granular Material Class II, aggregate or sound earth or any other approved material is included in the unit price of related pay items for new curb new and will not be paid separately.

The cost for any saw cutting is considered included in the pay item of this work and no additional payment for it will be made.

Measurement and Payment. Integral Curb and Sidewalk, 2 Feet, Rem, Modified will be measured and paid for at the contract unit price per foot.

Pay Item

Pay Unit

Integral Curb and Sidewalk, 2 Feet, Rem, Modified

Foot

CITY OF DETROIT
SPECIAL PROVISION
FOR
SIDEWALK, CONC, __ INCH, MODIFIED

1 of 2

DET-UP

Revised: 01- 04-2012

Description. The work consists of constructing concrete sidewalk of the thickness specified, in accordance with Section 803 of the 2012 Michigan Department of Transportation Standard Specifications for Construction, Special Detail R-29 series and this special provision.

Construction. Construct all sidewalks with a normal cross slope of 2.00 % (1/4 inch per foot) sloping down towards the street but not less than 1.00 % minimum when existing conditions prevent from having normal slope.

Construct concrete sidewalk to a minimum 4-inch thickness at all locations called for, with the following exceptions:

Construct 6-inch thick concrete sidewalk for residential driveway area, the first flags of sidewalk adjacent to commercial driveways and alley pavements;

Construct 6-inch thick concrete sidewalk for a 3 feet minimum width from the face of curb at street returns. The Engineer will determine the limit of this item so that unusual jointing with the adjacent 4-inch thick sidewalk does not occur.

Restore area disturbed beyond actual sidewalk repair limits to its original conditions. Existing berm area shall be restored with like replacement. No separate payment will be made for such restoration but is considered part of work item.

Sidewalk Joints

All sidewalk joints shall be constructed in accordance with the applicable provisions of Subsection 803.03 D of the 2012 MDOT Standard Specifications and Special Detail R-29 series except as modified herein.

Where hydrants or utility pole are located within the sidewalk area, a 3-foot knockout squared centered on hydrant or utility pole shall be constructed with full depth ½-inch expansion paper and a 30-pound felt paper shall be wrapped around the hydrant or utility pole at contact with concrete.

CITY OF DETROIT
SPECIAL PROVISION
FOR
SIDEWALK, CONC, __ INCH, MODIFIED

2 of 2

DET-UP

Revised: 01- 4-2012

Measurement and Payment. The completed work for "Sidewalk, Conc, __inch, Modified" of the thickness specified will be measured and paid for at the contract unit price for the following items. Any excavation or granular backfill 4 inches or less required to construct the walk shall be included in this item of work and will not be paid for separately.

Pay Item

Pay Unit

Sidewalk, Conc, 4 inch, Modified

Square Foot

Sidewalk, Conc, 6 inch, Modified

Square Foot

CITY OF DETROIT
SPECIAL PROVISION
FOR
SIDEWALK, CONC WITH TREE ROOTS, ____ INCH

1 of 1

DET: NYS
UP

01-22-15
05-12-12

Description The " Sidewalk, Conc with Tree Roots, ____ Inch" is designated for the sidewalk replacement which has been raised by tree roots and requires trimming of the tree roots in conjunction with the sidewalk replacement, as directed by the Engineer.

This item of work includes: Cutting and removing tree roots, removing wood chips and all debris material properly disposed of off site; backfilling, compacting, and grading of the removal area and its adjacent areas; and construction of concrete sidewalk.

Concrete sidewalk of the thickness specified shall be constructed in accordance with Section 803 of the 2012 Michigan Department of Transportation Standard Specifications for Construction and the City of Detroit Special Provision for Sidewalk, Conc, ____ inch, Modified. Sidewalk cross slopes shall be between 1% and 2% sloping down towards the street.

Method of Measurement and Basis of Payment. The "Sidewalk, Conc with Tree Roots, ____ inch" shall be measured in square foot.

The contract unit price for the "Sidewalk, Conc with Tree Roots, ____ inch" shall be the full compensation for all work required to complete this pay item, including all labor, equipment and material.

Pay Item

Pay Unit

Sidewalk, Conc with Tree Roots, ____ inch

Square Foot

CITY OF DETROIT
SPECIAL PROVISION
FOR
SIDEWALK RAMP, ADA, MODIFIED and
DETECTABLE WARNING SURFACE TILE, MODIFIED

1 OF 2

DET-UP

Revised: 01-04-2012

Description. This special provision covers construction of sidewalk ramp with detectable warning surface and or Retrofitting existing sidewalk or sidewalk ramp with detectable warning surfaces.

The work consist of constructing sidewalk ramp and or retrofitting ramp with detectable warning surface in accordance with the applicable provisions of Section 803 of the 2012 MDOT Standard Specifications for Construction and the current MDOT Standard Plan R-28 Series except as modified herein.

Complete this work in conformance with the American with Disability Act (ADA) provisions as applicable.

Material. The Detectable Warning Surface color shall be will be brick red, federal color number 22144, unless otherwise approved by the Engineer. The color shall be homogeneous throughout the tile

Construction. Construct sidewalk ramp(s), landings and flares six inches in thickness. Install detectable warning surface according to the manufacturer's instructions and the current MDOT Standard Plan R-28 Series.

The curb and gutter section at the bottom of the ramp (ramp opening) shall be a full depth curb and have a minimum depth of 12 inches.

It is also the Contractor's responsibility to incorporate any changes made to the ADA accessibility requirements that may take effect prior to the start date of actual construction. If the Contractor determines that any changes significantly alter the original bid cost, the Contractor may submit a written request to the Engineer or his representative for approval and compensation. Include a cost comparison between the original bid cost and the cost of the ADA required changes in the request.

The contractor shall stamp all concrete with a legible stamp bearing the name of the company and the year of construction. No sidewalk or ramp construction shall commence without a Contractor's stamp on site.

CITY OF DETROIT
SPECIAL PROVISION
FOR SIDEWALK RAMP, ADA, MODIFIED and
DETECTABLE WARNING SURFACE TILE, MODIFIED

2 OF 2

DET-UP

Revised: 01-04-2012

Measurement and Payment. The completed work as described herein for Sidewalk Ramp, ADA, Modified which includes Detectable Warning Surface Tile, Modified will be measured and paid for at the contract unit price using the following contract item (pay item). The contract unit price will be payment in full for furnishing all materials, labor and equipment necessary to construct the curb.

Pay Item

Sidewalk Ramp, ADA, 6 inch, Modified
Detectable Warning Surface Tile, Modified

Pay Unit

Square Foot
Foot

Sidewalk Ramp, ADA, Modified will be measured by the area of the ramp, the landing, flares, and monolithic rolled curbs along the longitudinal edges of the ramp, and the curb or the curb integral with pavement at the bottom of the ramp.

Payment includes all labor, materials, and equipment required to construct the sidewalk ramp pavement including the landing, flares, and monolithic rolled curbs along the longitudinal edges of the ramp, and the curb or the curb integral with pavement, at the bottom of the ramp. Any excavation or granular backfill required to construct sidewalk ramps will be included in this item of work and will not be paid for separately.

Restore berm areas disturbed beyond sidewalk ramp repair limits to its original conditions. No separate payment will be made for such restoration but is considered part of work item.

Replacement of all sidewalk, curb, or curb integral with pavement outside the area measured for "Sidewalk Ramp, ADA, Modified" will be paid for separately.

Detectable Warning Surface Tile, Modified will be measured per foot. Payment includes the detectable warning surface tile(s) and all labor, materials, and equipment to install the detectable warning surface for a Sidewalk Ramp, ADA, Modified.

If the Contractor elects to remove the existing concrete sidewalk or sidewalk ramp in conjunction with retrofitting a Detectable Warning Surface Tile, Modified, the unit price for a **Detectable Warning Surface Tile, Modified** will include the cost of removing sidewalk, sidewalk ramp and restoration.

Any constructed ramps that do not meet the current MDOT Sidewalk Ramp Standard Plans and the latest ADA accessibility requirements will be removed and replaced by the Contractor, as directed by the Engineer or his representative, at the Contractor's expense.

CITY OF DETROIT
SPECIAL PROVISION
FOR
INTEGRAL CURB AND SIDEWALK, 2 FEET, MODIFIED

1 of 1

DET: UP

Revised: 03-14-2013

DESCRIPTION:

This work shall consist of the construction of an Integral Curb and Sidewalk in accordance with details shown on the plans or as directed by the Engineer, and shall conform to the requirements of Section 803 of the 2012 Michigan Department of Transportation Standard Specifications for Construction.

The work shall include all labor, material, and equipment necessary to construct the Integral Curb and Sidewalk, 2 Feet, Modified. Earth Excavation, backfill with granular material, an expansion joint and other items which may be required shall be considered included in the construction of Integral Curb and Sidewalk, 2 Feet, Modified. Removal of the existing curb and sidewalk and/or existing integral curb and sidewalk will be paid separately.

Where there is a stepped curb, the Integral Curb and Sidewalk, 2 Feet, Modified shall be constructed to meet the face of the step curb. The exact height of the curb face and the width of the Integral Curb and Sidewalk will vary depending upon the field conditions and shall be constructed as directed by the Engineer. Where the difference between the sidewalk and gutter elevations is less than 7 inches, the Integral Curb and Sidewalk shall be constructed to eliminate the step.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT:

"Integral Curb and Sidewalk, 2 Feet, Modified" will be measured and paid for per lineal foot.

Pay Item

Integral Curb and Sidewalk, 2 Feet, Modified

Pay Unit

Foot

**CITY OF DETROIT
SPECIAL PROVISION
FOR
DR STRUCTURE COVER, ADJ, CASE___, MODIFIED and
RECONSTRUCTING DR STRUCTURE, CASE___, MODIFIED
WATER SHUTOFF, ADJ, MODIFIED**

1 of 2

DET: UP

Revised: 07-14-2014

Description. The work consists of Adjusting Drainage Structure Covers in accordance with the applicable provisions of Section 403 of the 2012 MDOT Standard Specifications for Construction except as modified herein.

Drainage Structure Cover Adjustment and Reconstructing will include all Public Lighting Department manholes, all water main gate wells, sewer manholes and catch basins whose covers are raised or lowered to meet the required elevations. Water Shutoff Adjustment will include water shutoff boxes or stop boxes, Public Lighting Department hand holes being raised or lowered to meet required elevations.

Before starting this work the Contractor and the Engineer, or his designate, shall jointly inspect each structure to evaluate its interior conditions. Access to structures will be provided by the Contractor. The Engineer, or his designate, shall determine whether the structure is to be adjusted or reconstructed. The Engineer shall also determine if any structure cleaning is necessary to remove existing debris. The Contractor shall remove all debris from the structure resulting from the contractor's operation.

The existing frame and cover shall be carefully removed and the upper portion of the existing manhole structure repaired as necessary and raised or lowered as required. The frame and cover shall then be reset on the adjusted structure so as to fit the required grade and cross section.

Where the structure is in need of repair, as determined by the Engineer, within the limits provided for under these items, it will be broken down and rebuilt with new materials to the required elevation.

Payment for "Dr Structure Cover, Adj, Case___, Modified" shall include all labor, material and equipment necessary to raise or lower existing structure rim up to 0.70 foot and involving adjustment (addition and/or removal), repair or replacement of up to three (3) courses of bricks including mortar, regardless of whether or not it is necessary to remove cone section to accommodate the rim adjustment.

Payment for "Reconstruct Dr Structure, Case___, Modified" shall include all labor, material and equipment necessary to raise or lower existing structure rim by more than 0.70 foot and involving adjustment (addition and/or removal), repair or replacement of more than (3) courses of bricks including mortar, and may include removal of cone section to accommodate the rim adjustment. Structures may have to be rebuilt to accommodate horizontal as well as vertical displacement.

Construction. Where called for on the plans or authorized by the Engineer, existing structures cover shall be adjusted to the proper elevation in accordance with section 403 of the 2012 MDOT Standard Specifications for Construction except as modified herein.

**CITY OF DETROIT
SPECIAL PROVISION
FOR
DR STRUCTURE COVER, ADJUSTMENT, MODIFIED and
RECONSTRUCTING DR STRUCTURE, MODIFIED**

2 of 2

DET: UP

Revised: 03-15-12

Remove adjacent pavement, curb, curb and gutter, or sidewalk as necessary to adjust the castings. Remove an opening at least a 5 feet x 5 feet opening in conjunction with adjusting the casting. Saw cut the existing pavement, curb, or curb and gutter for removal. Saw cut the existing pavement full depth around the opening. Raise the covers to the proper elevation by supporting it on brick masonry, so constructed as to hold them firmly in place, or lowered to the proper elevation and reset on full mortar bed. Replace adjacent pavement, curb, or curb and gutter to match existing grades or to the required new elevation.

Non-ferrous handhole covers used by Public Lighting Department and other City Utilities are made of fiberglass, copolymer propylene or similar material. These covers shall be adjusted by a qualified electrical contractor. The removal of concrete around the perimeter of a Non-ferrous handhole shall be done with light chipping hammers to insure that no damage is done to the cover, handhole or any conduit or other utility that may feed the structure. Any damage to structures, conduits, cable, and etcetera shall be repaired by the Contractor at no cost to the City.

For HMA pavement sections, immediately before placing the HMA top course or overlay, make final adjustments to drainage structure covers. Equipment will not be permitted to operate over adjusted structures any sooner than 24 hours after their completion, unless otherwise approved by the Engineer.

Measurement and Payment. The completed work as described for Adjusting Drainage Structure Covers will be measured as units and will be paid for at the contract unit price as follow, which price will be payment in full for furnishing all materials and labor, fittings; pavement, curb, curb and gutter, and sidewalk removal and replacement, excavation, backfilling, disposal of surplus material, removal of all debris and foreign material from the structure (including the sump); and adjusting the structure cover to the required elevation, with the existing or new cover, and providing access to all structures for inspection, as directed by the Engineer.

Structure damage, due to contractor operations shall be repaired at the Contractor's expense.

A finish concrete collar shall be placed around any structure adjusted within 5 feet of the Detroit Thermal (formerly Detroit Edison) steam lines, as directed by the Engineer. The cost of this shall be paid separately as Concrete Repr, Nonreinf Conc, 10 inch, Modified measured based on surface area of the concrete collar.

<u>Pay Item</u>	<u>Pay Unit</u>
Dr Structure Cover, Adj, Case 1, Modified	Each
Dr Structure Cover, Adj, Case 2, Modified	Each
Reconstructing Dr Structure, Case 1, Modified	Each
Reconstructing Dr Structure, Case 2, Modified	Each
Water Shutoff, Adj, Modified	Each
Concrete Repr, Nonreinf Conc, 10 inch, Modified	Syd.

CITY OF DETROIT
SPECIAL PROVISION
FOR
DR STRUCTURE COVER, MODIFIED

1 of 2

DET: A.A.

Revised: 2/20/14
3/12/12

a. Description. Existing catch basins, manholes, gate valve wells and other similar structures, which are located within the area of the proposed pavement or existing pavement which is to be retained, that have defective or worn frames and covers, on structures which are to remain in service, shall have new frames and covers supplied and installed by the Contractor.

b. Materials. Catch basin and manhole frames and covers shall be gray iron casting, A.S.T.M. A48, Class No. 30B. Castings shall be sound, true to form and thickness, clean and neatly finished. The seating face on covers and grates and the corresponding seat on the frame shall be machine finished so that there will be even bearing at all points with no rocking or tilting. The frame and its cover or grate shall constitute one unit. Each unit shall conform to the detailed requirement of the respective Standard Drawings.

The castings for catch basins shall be as follows:

East Jordan 5000 Assembly or Approved Equal
Product Number. 00500063B01; Weight. 219 Lb
Product Number. 00500063B02; Weight 241 Lb

The castings for drainage manholes shall be as specified in the Material Section of the Special Provision for Drainage Structures and the Standard Plan for Manhole Frame and Cover.

East Jordan Assembly: 00104051L01 or Approved Equal

The castings for gate valve wells shall be as specified in the Standard Plan for Gate Well Frame and the Cover Standard.

East Jordan Assembly 0014050L01 or Approved Equal

The castings for Public Lighting Commission (PLC) manholes shall be as specified in the Standard Plan for P.L.C. Pattern No. 2A Street Type Cover.

Public Lighting Department (PLD) handhole and manhole frames and covers shall be labeled "Public Lighting Department" and sized as shown in the revised Standard Drawings attached.

Shop drawings for the catch basin frames detailing all dimensions shall be submitted to the Engineer for approval. No frames except those manufactured in conformance with the approved shop plans will be permitted to be used on the project.

2 of 2

DET: A.A.

Revised: 2/20/14
3/12/12

c. Construction. Catch basin and manhole frames and covers shall be set in a full bed of mortar on the top of the existing structure wall at such elevation that when the structure cover is set in place the complete unit of frame and cover will be at the required finish or final surface grade. The cover shall so fit the frame that no rattling occurs under traffic loadings. If rattling does occur, the frame and/or cover shall be machined so as to eliminate the rattling.

d. Measurement and Payment. Catch basin and manhole frames and covers will be measured as "Dr Structure Cover, Modified" and paid for per pound. The contract unit price shall be payment in full for furnishing and installing the required frames, covers and fittings complete.

Any additional labor, material, and equipment required to install the frames and covers shall not be paid for separately.

Pay Item

Dr Structure Cover, Modified

Pay Unit

Pound

CITY OF DETROIT
SPECIAL PROVISION
FOR
DR STRUCTURE CLEANING, MODIFIED AND SEWER CLEANOUT, MODIFIED

1 of 1

DET:

Revised: 02-20-14

Description. The work of Dr Structure Cleaning, Modified consists of cleaning existing catch basins and manholes in the area of the project where directed by the Engineer. The work of sewer cleanout consists of cleaning cross-pipes between catch basins or manholes.

Some of the catch basins, manholes and sewers may be completely filled. The Engineer shall determine actual condition and necessity for cleaning prior to cleanout. Cleaning shall restore 90% of the pipe's carrying capacity.

Construction. When necessary and as directed by the Engineer, the catch basin nearest to the trunk sewer shall be cleaned first and a temporary bulkhead placed in order that the trunk sewer not be infiltrated. Upstream catch basins or manholes and cross-pipes may then be cleaned.

Cleaning shall be by high velocity hydro-cleaning (jetting). Mechanical cleaning shall only be used when authorized by the Engineer. Contractor shall take precautions to protect the sewer lines from damage.

No debris shall be accumulated on site except in totally enclosed containers approved by the Engineer. All material deposits shall be removed from site and disposed of at an approved location.

Measurement and Payment. "Dr Structure Cleaning, Modified" will consist of cleaning catch basins or manholes. "Dr Structure Cleaning, Modified" will be paid for at the contract unit price each, and will include all equipment and labor necessary to clean each catch basin or manhole.

"Sewer Cleanout, Modified" consists of cleaning sewers between catch basins or between catch basins and manholes. "Sewer Cleanout, Modified" will be paid for at the contract unit price per foot which will include payment for furnishing all equipment and labor to clean sewers and hauling away any waste and debris generated. Temporary bulkhead will be included in the cost of "Sewer Cleanout, Modified".

Pay Item

Pay Unit

Dr Structure Cleaning, Modified
Sewer Cleanout, Modified

Each
Foot

CITY OF DETROIT
SPECIAL PROVISION
FOR
DRAINAGE STRUCTURES, MODIFIED

1 of 8

DET:A.A.

Revised: 2/20/14
2/06/12

Description. This work consists of constructing all manholes, and catch basins to the size, type, special design, and type of backfill as shown on the plans. Manholes and catch basins shall be constructed to the line and elevation of final grade or as otherwise shown on the plans. The work includes maintenance of sewer service where manholes are built over existing sewers and shall be in accordance with Section 403 of the 2012 Michigan Department of Transportation Standard Specifications for Construction except as otherwise specified.

Materials.

Manhole Frames and Covers - Round:

Round manhole frames and covers shall conform to the Detroit Water and Sewerage Department (DWSD) standard unit, as detailed on the project Drawings. Both the frame and cover shall be castings conforming to the requirements of A.S.T.M. Specification, "Gray Iron Castings," A48, Class 30B.

East Jordan ERGO Assembly or Approved Equal
Product Numbers 00104050L01 and 00104051L01; Weight 235 Lb

Perforated covers shall be used unless otherwise indicated on the project Drawings.

Castings shall be sound, true to form and thickness, clean and neatly finished. The seating face on the cover and the corresponding seat on the frame shall be machine finished so that there will be even bearing at all points with no rocking or tilting.

When a sufficient supply is available, the frames and covers may be purchased from the Sewer Maintenance and Construction Division of the Detroit Water and Sewerage Department.

Catch Basin Frames and Covers

The physical requirements for Catch Basin Frame and Covers will be in accordance with the requirements for manhole frames and covers. The castings for Catch Basin A and B shall be as follows.

East Jordan 5000 Assembly or Approved equal
Product Number 00500063B01, Weight 219 Lb
Product Number 00500063B02; Weight 241 Lb

2 of 8**DET:A.A.****Revised: 2/20/14
2/08/12**

Shop drawings for the Catch Basin Frames and covers detailing all dimensions shall be submitted to the Engineer for approval. No frames except those manufactured in conformance with the approved shop plans will be permitted to be used on the project.

Frames and covers for all other catch basins shall be in accordance with details shown on the plans.

Manhole Steps:

Manhole steps shall be of aluminum alloy conforming to the requirements for "Aluminum Alloy Extruded Bars, Rods, Shapes and Tubes," A.S.T.M. B221, alloy 6061, and temper T6. The shape and dimensions of each step shall conform to the details shown on the drawings at the end of this section.

A certificate by the manufacturer shall be submitted to the Engineer prior to installation of any step, that the materials meet the requirements of the A.S.T.M. Specification.

Brick:

All brick shall be rectangular in shape with reasonably sharp corners and edges. The standard size shall be 2¼ inches to 2½ inches by 3¾ inches by 8 inches. The dimensions of the brick shall not vary over 1/8 inch in either transverse dimensions and ¼ inch in length. All brick shall be frogged or cored, unless otherwise approved.

Brick shall be free from cracks and flaws and otherwise conform to current ASTM Specifications for "Sewer and Manhole Brick," C32 or "Concrete Building Brick," C55 as is applicable.

Brick shall be sampled and tested in accordance with applicable ASTM Specification for "Sampling and Testing Brick," C67 or "Concrete Masonry Units, Sampling and Testing" C140.

**MAXIMUM
ABSORPTION
(By Weight)**

Clay or Shale Brick:	
5 Hour Boiling Test	
Average of 5 Brick	16%
Individual Brick	18%
Concrete Brick:	
24 Hour Immersion	
Average of 5 Brick	8%
Individual Brick	10%

3 of 8**DET:A.A.****Revised: 2/20/14
2/06/12****COMPRESSION
STRENGTH****All brick shall meet the same compressive strength requirements:**

Average of 5 Brick	3,500 p.s.i..
Individual Brick	3,000 p.s.i.

The use of lime, in any form, as a major constituent of brick shall not be permitted.

Concrete Block:

Concrete block, for use in manhole construction, shall conform to the requirements of A.S.T.M. Specification for "Concrete Masonry Units for Construction of Catch Basins and Manhole," C139. The size and shape of the block shall be in accordance with the details on the Drawings.

Precast Concrete Manhole Sections:

Precast reinforced concrete sections for 4 ft. diameter manhole construction shall conform to the requirements of A.S.T.M. Specification, "Precast Reinforced Concrete Manhole Sections," C478 with the following exceptions and additions:

The required manhole steps shall be cast in place with the required spacing and alignment. The top or dome section shall be an eccentric cone with a minimum height of 32 inches. The smaller upper opening shall be designed to accommodate the manhole frame. Where a watertight frame is to be provided, the anchor bolts or stud inserts for the frame shall be cast in place with the required spacing and alignment.

The minimum shell thickness shall be one-twelfth of the internal diameter in inches of the riser or largest cone diameter plus one (1) inch.

No holes for inlet or outlet pipes shall be made in precast units at the site of the work. All necessary openings shall be formed into the precast manhole section as part of the casting operation.

Precast Manhole Bases:

Precast manhole bases for 48-inch diameter manholes shall be reinforced concrete using 3,000 pound concrete. The minimum diameter of the base shall be equivalent to the outside diameter of the manhole. The slab shall be a minimum of 8 inches thick and reinforced two ways with a minimum of 0.14 square inches of steel reinforcing per foot of diameter in each direction placed in the center of the precast circumference of a 48-inch diameter circle shall be provided.

Where the bottom section of the manhole is cast integrally with the base, the base portion shall conform to the requirements stated above.

DET:A.A.

Revised: 2/20/14
2/06/12**Mortar:**

Mortar for brick or masonry work shall be mixed by volume in the proportions of one part Portland cement to two parts sand. Mortar shall be highly plastic with high water retentivity. A bag of cement 94 pounds shall be considered one cubic foot.

The cement and sand shall first be mixed dry to a uniform color in a batch mixer or a tight mortar box, and then mixed thoroughly with water which shall be added gradually until the required consistency is obtained. Mortar shall be mixed in batches of such sizes as will be used immediately and any mortar which has set sufficiently to require retempering shall not be used.

Catch Basins A, Catch Basins B and Catch Basins B with Trap

Catch Basins A, B and Catch Basins B with Trap shall be constructed in accordance with details shown on the Plans and/or as directed by the Engineer. The materials for Catch Basins shall be in accordance with the materials for "Manholes."

Catch Basins 18 inch x 12 inch, Special "Y"

Catch Basins 18 inch x 12 inch, Special "Y" shall be constructed of concrete sewer pipe.

The pipe joints shall be on cement mortar complying with the applicable requirements for sewers.

Catch Basin "L"

Catch basin "L" shall be constructed of standard concrete sewer pipe.

CONSTRUCTION METHODS:**Manholes**

Manholes may be constructed of block or precast reinforced concrete manhole sections, in accordance with the respective details shown on the Drawings, unless a specific type is called for on the Drawings.

Blocks used in manhole construction shall be laid with full mortar joints. All available bearing areas shall be covered with mortar spread in an even layer without splitting or furrowing, and all vertical and interior joints solidly filled with mortar. The courses shall be laid even except where otherwise required. Manholes shall be constructed to be as plumb as is practical.

5 of 8**DET:A.A.****Revised: 2/20/14
2/06/12**

Concrete block, where used, shall be laid in courses of whole blocks only by using units of the proper size. The joints between individual blocks and between courses shall be uniform. Vertical joints in adjacent courses shall be staggered. The upper portion of the manhole as detailed on the Drawings, shall be "domed" by drawing the block courses equally and evenly to the diameter of the opening at the top required to fit the manhole frame opening. Such doming may be by blocks, provided whole units of such sizes are used to evenly effect the doming. Otherwise, brick, as above specified, shall be used for such sections. All interior mortar joints shall be finished flush. A 1/2 inch thick mortar coat shall be applied to the outer surface of the manhole.

Precast reinforced concrete manhole sections, where used, shall be placed in accordance with the details shown on the Drawings. Such manhole sections shall rest on an integral bottom section and base or concrete block masonry laid up from the manhole base slab. Bottom section or masonry units shall be installed to such a height that when whole manhole sections are used, including the upper dome section, the top of the manhole will be at the proper elevation to accommodate the manhole frame and cover at the required finished grade. When the alternate manhole bottom construction is used, the length of the risers and the dome section shall be adjusted so that the top of the manhole will be at proper elevation to accommodate the manhole frame and cover at the required finished grade.

The joints between the pipe sections in the field shall be synthetic rubber gaskets as specified under "Sewers".

Where precast manhole bases or integral bottom sections are used, they shall be placed on a 3-inch layer of sand. After placing the sand, it shall be leveled to provide a uniform bearing surface for the slab and a level foundation on which to start construction of the manhole.

A manhole built over a brick or pipe sewer shall be thoroughly bonded to the sewer barrel and all connections made without projections or voids. Manholes, when completed, shall be cleared of all scaffolds and thoroughly cleaned of surplus mortar, building materials and all foreign matter.

Where a connection of an existing sewer to a proposed manhole is indicated on the plans, the portion of the sewer removed shall be replaced, beyond the limits of the manhole, with an equivalent size of circular pipe and of the strength approved by the Engineer. This work shall be considered as included in the construction of the manhole and will not be paid for separately.

DET:A.A.

Revised: 2/20/14
2/06/12**Manhole Steps:**

Manhole steps shall be firmly embedded in the manhole wall or structure in true vertical alignment, spaced as shown on the Drawings, and shall project uniformly, 6½ inches from the face of the wall to the outside edge of the step.

The portion of the step to be embedded in concrete manhole sections or concrete structures shall be wire brushed or otherwise roughened and then covered with one coat of "Bitumastic Super Service Black", as manufactured by Koppers Company, Tnemcol No. 450 heavy, as manufactured by Tnemco Co., or "Bitumastic Super Service Black", as manufactured by Somay Products Inc.. The coating shall be applied and allowed to dry in accordance with the manufacturer's recommendations.

The coating shall extend beyond the embedment at least one inch.

The steps shall not be 'muddled-in' pipe sections, but shall be inserted in the 'green' concrete prior to initial set of the concrete.

Steps to be placed in existing concrete shall be placed in drilled holes and the void space packed with non-shrink grout, using "Embeco", "Groutex", "Ferrolith-G", or approved equal. The mixing and installation of the non-shrink grout shall follow the procedure recommended by the manufacturer of the grout

Manhole Frame and Cover:

The standard round manhole frame shall be set in a full bed of mortar on the top of the manhole wall at such elevation that when the manhole cover is set in place the complete unit of frame and cover will be at the required finish or final surface grade. The cover shall so fit the frame that no rattling occurs under traffic loadings. If rattling does occur, the frame and/or cover shall be machined so as to eliminate the rattling.

Backfilling Around Manholes:

Backfilling adjacent to manhole walls shall be done in such a manner as to simultaneously raise the level of the fill uniformly on all sides of the manhole, compacted as noted below.

No backfilling shall be done around manhole walls within less than 48 hours after the plaster coat has been applied to the outside of the manhole walls.

During the operation of backfilling of an excavation that is sheeted and braced, earth supports shall not be removed in such a manner as to permit earth bank or adjacent streets to give way. Sheet piling and bracing may be left in place during backfilling and pulled when backfilling is completed. Sheet piling and bracing impossible to remove may be left in place, provided it is cut off 5 feet below ground surface.

DET:A.A.

Revised: 2/20/14
2/06/12

Pipes entering a manhole above the bottom of the structure shall be supported with Grade "X" concrete or a masonry pier down to undisturbed earth as indicated on the plans. Grade "X" concrete shall consist of three sacks of cement per cubic yard of concrete and shall be included in the construction of the Manholes.

The backfilling shall be placed and compacted as specified under the City of Detroit Special Provision for Sewers.

Bulkheads:

Brick bulkheads, as required, shall be built of common brick. The surface of contact of the sewer wall with the bulkhead shall be cleaned and then roughened by bush-hammering or chiseling just prior to the bulkhead construction. Such bulkheads shall be vertical, of the thickness shown on the Drawings with alternate header and stretcher courses laid in mortar in the manner specified for "Manholes." The joints shall be 5/8 inch thick and finished flush.

Removal of bulkheads shall be done in a careful manner that will avoid damage to the sewer. The surface of contact of the sewer wall with the bulkhead shall be cleaned of all brick and mortar and the wall surface left as smooth as possible without mortar patching. The materials from the removed bulkhead shall be promptly removed from the sewer and not left to accumulate.

Unless otherwise specified, the building or removing of bulkheads are included in manhole or sewer construction and will not be paid for separately.

Separate payment will be made only for bulkhead built in 18-inch diameter sewers and larger, or the equivalent size in an egg shape sewer.

Catch Basins A, Catch Basins B and Catch Basins B with Trap

Catch Basins A, Catch Basins B and Catch Basins B with Trap shall be constructed in accordance with details shown on the Plans and/or as directed by the Engineer. The construction methods for Catch Basins A and B shall be in accordance with the construction methods for "Manholes."

Catch Basins 18 inch x 12inch, Special "Y"

Catch Basins 18 inch x 12inch, Special "Y" shall be constructed in accordance with the Plans and/or as directed by the Engineer.

The pipe joints shall be on cement mortar complying with the applicable requirements for sewers.

Catch Basin "L"

Catch basin "L" shall be used "only" when directed by the Field Engineer or when called for on drawings instead of the standard "Y" basin. Contractor shall construct a standard half trap if directed to do so by the Field Engineer.

8 of 8

DET:A.A.

Revised: 2/20/14
2/06/12

Measurement. "Manholes" of the size, type and special design called for will be measured as units.

Catch Basins, as detailed on the Plans, will be measured as units, regardless of the depth of the structure.

Payment. Manhole of the size, type and special design called for will be paid for at the contract unit price each, which shall be payment in full for furnishing the material including required covers and fittings and constructing the structure complete. The contract unit price shall include the cost of maintaining existing sewer service. Excavation, all backfill and disposal of waste excavated material are included in the manhole items without separate payment therefore.

Pavement, curb, and sidewalk removal and replacement will be paid for separately.

Catch Basin A, Catch Basin B, Catch Basin B with Trap, and Catch Basin 18" X 12" Special "Y", Catch Basin "L", Modified will be paid for at the contract unit price each, which shall be payment in full for furnishing the materials including required frames, covers, fittings, traps and constructing the structure complete. The contract unit price shall include the cost of maintaining existing sewer service. Excavation, all backfill and disposal of waste excavated material are included in the catch basin items without separate payment.

Pavement, curb, sidewalk removal and replacement will be paid for separately.

Pay ItemPay Unit

Catch Basin L, Modified	Each
Catch Basin A, Modified	Each
Catch Basin B, Modified	Each
Catch Basin BT, Modified	Each
Catch Basin 18 inch x 12 inch, Special 'Y', Modified	Each
Manhole, 4 foot, Standard, Modified	Each

CITY OF DETROIT
SPECIAL PROVISION
FOR
TOPSOIL SURFACE, FURN, LM, MODIFIED

1 of 1

DET: NYS

01-22-15

DESCRIPTION:

"Topsoil Surface, Furn, LM, Modified" shall be in accordance with Section 816 of the 2012 MDOT Standard Specifications for Construction except as herein modified. The depth of topsoil placed shall vary as required to provide a uniform slope after modifying the top of curb elevation. The preparations of the foundation shall be as specified in the 2012 MDOT Standard Specifications for Construction. Lawn sprinkler systems, if encountered, shall be protected by the Contractor at no extra cost. Any damage to lawn sprinkler systems due to Contractor or his sub-contractor's work shall be repaired by the Contractor at no cost to the city.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT:

"Topsoil Surface, Furn, LM, Modified" shall be measured and paid for per cubic yard (loose measure). The contract unit price shall be payment in full for furnishing all materials, labor and equipment necessary to complete the work.

Pay Item

Pay Unit

Topsoil Surface, Furn, LM, Modified

Cubic Yard

**SPECIAL PROVISION
FOR
HYDROSEEDING, MODIFIED
1 of 1**

DET: UP

12-18-2012

DESCRIPTION: These items of work consist of furnishing and installing mulch and permanent seeding on the prepared topsoil bed using hydroseeding method in accordance with the requirements of Sections 816 and 917 of the 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction. The seed mixture, the type of mulch (wood with tackifier), the rates of application, and the guarantee to establish growth shall be as specified herein.

CONSTRUCTION METHODS: Seed shall be sown by using hydroseeding method in accordance with the requirements of Subsection 816.03 of the 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction. The rate of application of the seed mixture shall be 250 pounds per acre. The rate of application for the mulch shall be 2500 pounds per acre. The application rate for the chemical fertilizer nutrient shall be as stated in the Standard Specifications.

The Contractor shall be responsible to establish growth of lawn areas where the seed mixture is installed.

MATERIALS: The seed mixture shall be TUF (Turf Urban Freeway per Table 917-1). The seed and chemical fertilizer nutrient shall meet the requirements specified in Subsections 917.10 and 917.12 of the 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction. Mulching shall be performed using wood mulch with tackifier approved by the Engineer.

MEASUREMENT AND PAYMENT: The completed work of hydroseeding will be measured in place by area in square yards applied. The contract unit price will be payment in full for furnishing all labor, materials including mulch, seed and chemical fertilizer nutrient and hydro-seeding equipment involved in installing the mulch and seed, including establishing growth.

Pay ItemPay Unit

Hydroseeding , Modified

Square Yards

City Of Detroit
Special Provision
for
RECESSING for PAVEMENT MARKINGS

DPW / TED: JF

1 of 1

12-09-13

A. Description. Recessing grooves shall be cut into the roadway to facilitate the protection of pavement marking material from vehicle wear and cleaning equipment such as snow plows. This work shall be performed for the installation of all transverse line markings except where markings are in-laid into fresh hot asphalt. This work shall conform to Section 811 of the Standard Specifications for Construction and the following provisions specified herein.

B. Construction.

The groove recesses shall be made on concrete and asphalt road surfaces in a single dry pass cut and the equipment used shall be self-vacuuming and leave the cut groove ready for material installation. The blade tool shall be made of stacked diamond cutting heads or engineer approved flat-tooth design hard alloy material such as tungsten-carbide. The bottom of the groove shall have a fine corduroy finish. The remaining roadway surface shall be solid and intact and not cracked or broken with potentially loose pieces subject to breaking off. If a coarse tooth pattern or cracked road surface results, then the tooling must be changed. Either a) the number of blades is to be increased and the spaces on the cutting head are to be decreased or b) the type of blade is to be changed to a superior material or cutting tool design.

Recess Width: Material width +1 inch, + / - 1/8 inch

Recess Depth: As recommended by the manufacturer, + / - 5 mils

Permanent Marking Material Application:

The recessing equipment and method used shall comply with the pavement material manufacturer's installation instructions. Recess grooves shall be clean and dry prior to placing any pavement marking material. The entire pavement marking must be placed within the recess and shall be placed in the same day as the recessing work.

C. Measurement and Payment. The completed work as described will be paid for at the contract unit price for the following contract pay items:

<u>Contract Item (Pay Item)</u>	<u>Pay Unit</u>
_ Recessing for Pavt Mrkg, 06 inch.....	Foot
_ Recessing for Pavt Mrkg, 12 inch.....	Foot
_ Recessing for Pavt Mrkg, 18 inch.....	Foot
_ Recessing for Pavt Mrkg, 24 inch.....	Foot

The item of **Recessing Pavement Markings** includes all equipment and labor necessary to complete the work. Payment for any temporary paint lines (used as a template) is included in the item **Recessing Pavement Markings**.

[illegible]

DPW-City Engineering Division					BID TABULATION - PAVING										City of Detroit		
Title: HMA RESURFACING AND MISCELLANEOUS CONSTRUCTION ON W GRAND BLVD BETWEEN WOODWARD & LINWOOD, W VERNOR BETWEEN MICHIGAN & 17TH, W VERNOR BETWEEN FISHER FREEWAY & LIVERNOIS AND W VERNOR BETWEEN DIX & CENTRAL FOR THE DEPARTMENT OF PUBLIC WORKS															Contract No. PW- 6972		
Bids Opened: 7/27/15 (4:00 PM)				Bulletins Issued: 1			Compiled By: ads					Checked By: NYS			Sheet No. 2 of 5		
<div>BIDDER</div>	QUANTITIES AND UNIT PRICES																
	5010001 PAVT, CLEANING	5010005 HMA SURFACE, REM	5010008 PAVT FOR BUTT JOINTS, REM	5010025 HAND PATCHING	5010051 HMA, 4E3	5010057 HMA, 5E3	5017011 — COLD MILLING HMA SURFACE, MODIFIED	5017031 — CONDITIONING EXISTING PAVEMENT, MODIFIED	5017031 — HMA APPROACH, MODIFIED	5017031 — HMA SHOULDER, MODIFIED	6027011 — CONC PAVT, MISC, NONREINF, 8 INCH, MODIFIED	6027011 — PAVT REPR, NONREINF CONC, 10 INCH, MODIFIED	6030005 — CEMENT	6037001 — CURB, CONC, DETAIL CD, MODIFIED	6027011 — PAVT REPR, REM, MODIFIED	8027001 — DETECTABLE WARNING SURFACE TILE, MODIFIED	
	1	9,308	4,036	20	14,653	10,989	133,207	1,795	1,792	94	163	46	8	6,788	46	571	
	LS	SYD	SYD	TON	TON	TON	SYD	TON	TON	TON	SYD	SYD	TON	FT	SYD	FT	
CADILLAC ASPHALT, LLC 2575 HAGGERTY ROAD, SUITE 100 CANTON, MI 48188	2,855.00	2.35	2.35	32.20	64.10	75.05	2.35	6.85	111.11	213.56	25.00	50.00	1.00	0.11	20.00	60.00	
FORT WAYNE CONTRACTING, INC / AJAX PAVING INDUSTRIES, INC, A JOINT VENTURE 300 E SEVEN MILE ROAD DETROIT, MI 48203	#####	2.34	2.34	1.00	60.00	62.00	2.34	1.00	80.00	250.00	25.00	50.00	1.00	0.10	20.00	60.00	
0																	
SEE SHEET 5 OF 5																	

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City Engineering Division, D.P.W.				BID TABULATION - PAVING												City of Detroit		
Title: HMA RESURFACING AND MISCELLANEOUS CONSTRUCTION ON W GRAND BLVD BETWEEN WOODWARD & LINWOOD, W VERNOR BETWEEN MICHIGAN & 17TH, W VERNOR BETWEEN FISHER FREEWAY & LIVERNOIS AND W VERNOR BETWEEN DIX & CENTRAL FOR THE DEPARTMENT OF PUBLIC WORKS																Contract No. PW-6972		
Bids Opened: 7/27/15 (4:00 PM)				Bulletins Issued: 1				Compiled By: ads				Checked By: NYS				Sheet No. 5 of 5		
BIDDER	37																	
	8120251 PLASTIC DRUM, HIGH INTENSITY, OPER	8120350 SIGN, TYPE B, TEMP, PRISMATIC, FURN	8120351 SIGN, TYPE B, TEMP, PRISMATIC, OPER	8120370 TRAFFIC REGULATOR CONTROL	8160090 WATER, SODDING/SEEDING	8167011 HYDROSEEDING MODIFIED	8167021 TOPSOIL SURFACE, FURN, LM, MODIFIED	8237050 WATER SHUTOFF, ADJ, MODIFIED										CPO. No. 0
																		SPO No. 0
																		<input checked="" type="checkbox"/> Street <input type="checkbox"/> Alley
	386	1,600	1,600	1	2	1,381	115	37										TOTAL BID
	EACH	SFT	SFT	LS	UNIT	SYD	CYD	EACH										
CADILLAC ASPHALT, LLC 2575 HAGGERTY ROAD, SUITE 100 CANTON, MI 48188	1.00	4.00	0.29	11,222.00	1.00	0.01	50.00	400.00										\$3,837,398.45
FORT WAYNE CONTRACTING, INC / AJAX PAVING INDUSTRIES, INC, A JOINT VENTURE 300 E SEVEN MILE ROAD DETROIT, MI 48203	0.01	3.95	0.01	184,612.00	1.00	0.01	50.00	350.00										\$3,868,460.92
0																		\$0.00
	Engineer's Estimate of Construction Cost								\$3,735,433.95		Low Bid				\$3,868,460.92			
	Low Bid is <input checked="" type="checkbox"/> Above <input type="checkbox"/> Below Engineer's Estimate								\$133,026.97									
									3.56%		Other Cost							
											TOTAL PROJECT COST				\$3,868,460.92			

[illegible]

DPW-City Engineering Division							BID TABULATION - PAVING										City of Detroit			
Title: HMA RESURFACING AND MISCELLANEOUS CONSTRUCTION ON ALTER BETWEEN CHANDLER PARK & E JEFFERSON, MACK BETWEEN I-75 & RIOPELLE, E 7 MILE ROAD BETWEEN 1-75 & CONANT AND HARPER BETWEEN CADIEUX & I-94 CROSS OVER FOR THE DEPARTMENT OF PUBLIC WORKS																	Contract No. PW- 6971			
Bids Opened: 4/9/15 (2:00 PM)					Bulletins Issued: 1			Compiled By: ads					Checked By: NYS				Sheet No. 2 of 5			
BIDDER	QUANTITIES AND UNIT PRICES																			
	5010001 PAVT, CLEANING	5010005 HMA SURFACE, REM	5010008 PAVT FOR BUTT JOINTS, REM	5010025 HAND PATCHING	5010051 HMA, 4E3	5010057 HMA, 5E3	5017011 __ COLD MILLING HMA SURFACE, MODIFIED	5017031 __ CONDITIONING EXISTING PAVEMENT, MODIFIED	5017031 __ HMA APPROACH, MODIFIED	5017031 __ HMA SHOULDER, MODIFIED	6027011 __ CONC PAVT, MISC, NONREINF, 8 INCH, MODIFIED	6027011 __ CONC PAVT, MISC, NONREINF, 10 INCH, MODIFIED	6037001 __ CURB, CONC, DETAIL CD, MODIFIED	6027011 __ PAVT REPR, REM, MODIFIED	8027001 __ DETECTABLE WARNING SURFACE TILE, MODIFIED	8027010 __SIDEWALK RAMP, ADA, MODIFIED	0 2905959			
	1	14,752	2,196	25	12,169	9,127	110,627	1,492	2,840	203	184	350	5,725	350	1,620	29,520	0 2905960			
	LS	SYD	SYD	TON	TON	TON	SYD	TON	TON	TON	SYD	SYD	SYD	FT	SYD	FT	<input checked="" type="checkbox"/> Street <input type="checkbox"/> Alley			
	TOTAL BID																			
CADILLAC ASPHALT, LLC 2575 HAGGERTY ROAD, SUITE 100 CANTON, MI 48188	2,500.00	2.00	2.00	10.00	70.00	76.10	1.87	10.00	140.00	140.00	30.00	30.00	0.01	20.00	60.00	2.00	SEE SHEET 5 OF 5			
FORT WAYNE CONTRACTING, INC / AJAX PAVING INDUSTRIES, INC, A JOINT VENTURE 300 E SEVEN MILE ROAD DETROIT, MI 48203	2,500.00	1.87	1.87	0.01	62.50	65.75	1.87	0.01	0.01	260.00	40.00	40.00	8.00	20.00	84.25	4.00				
MAJOR CEMENT CO PO BOX 23740 DETROIT, MI 48223	1,250.00	5.00	2.00	10.00	77.00	83.00	2.10	10.00	140.00	140.00	52.00	120.00	5.00	35.00	75.00	7.00				

DPW-City Engineering Division						BID TABULATION - PAVING										City of Detroit			
Title: HMA RESURFACING AND MISCELLANEOUS CONSTRUCTION ON ALTER BETWEEN CHANDLER PARK & E JEFFERSON, MACK BETWEEN I-75 & RIOPELLE, E 7 MILE ROAD BETWEEN 1-75 & CONANT AND HARPER BETWEEN CADIEUX & I-94 CROSS OVER FOR THE DEPARTMENT OF PUBLIC WORKS																Contract No. PW- 6971			
Bids Opened: 4/9/15 (2:00 PM)				Bulletins Issued: 1				Compiled By: ads					Checked By: NYS			Sheet No. 3 of 5			
BIDDER	QUANTITIES AND UNIT PRICES																		
	8027010 __SIDEWALK CONC, 4 INCH, MODIFIED	8027010 __SIDEWALK CONC, 6 INCH, MODIFIED	8027010 __SIDEWALK CONC REPL, 4 INCH WITH TREE ROOTS, MODIFIED	8027010 __SIDEWALK CONC REPL, 6 INCH WITH TREE ROOTS, MODIFIED	8110024 PAVT MRKG, OVLY COLD PLASTIC, 6 INCH, CROSSWALK	8110041 PAVT MRKG, OVLY COLD PLASTIC, 12 INCH, CROSSWALK	8110044 PAVT MRKG, OVLY COLD PLASTIC, 18 INCH, STOPBAR	8110063 PAVT MRKG, OVLY COLD PLASTIC, LT TURN ARROW SYM	8110068 PAVT MRKG, OVLY COLD PLASTIC, ONLY	8110069 PAVT MRKG, OVLY COLD PLASTIC, THRU ARROW SYM	8110071 PAVT MRKG, OVLY COLD PLASTIC, RT TURN ARROW SYM	8110154 PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, WHITE	8110154 PAVT MRKG, SPRAYABLE THERMOPL, 4 INCH, YELLOW	8110197 PAVT MRKG, THERMOPL, 6 INCH, CROSSWALK	8110217 PAVT MRKG, THERMOPL, 18 INCH, STOPBAR	8117001 PAVT MRKG, MODIFIED URETHANE, 6 INCH, CROSS HATCHING, YELLOW	0 2905959		
	29,097	4,476	1,584	1,080	1,159	1,050	502	4	9	1	4	1,415	27,910	3,243	729	350	0 2905960		
	<input checked="" type="checkbox"/>	Street																	
	<input type="checkbox"/>	Alley																	
	SFT	SFT	SFT	FT	SFT	FT	FT	FT	EACH	EACH	EACH	EACH	FT	FT	FT	FT	TOTAL BID		
CADILLAC ASPHALT, LLC 2575 HAGGERTY ROAD, SUITE 100 CANTON, MI 48188	2.00	2.00	0.01	0.01	2.50	5.95	8.25	155.00	165.00	155.00	120.00	0.39	0.39	2.50	8.25	2.75	SEE SHEET 5 OF 5		
FORT WAYNE CONTRACTING, INC / AJAX PAVING INDUSTRIES, INC, A JOINT VENTURE 300 E SEVEN MILE ROAD DETROIT, MI 48203	3.40	3.60	5.10	5.50	2.50	5.95	8.25	155.00	165.00	155.00	120.00	0.39	0.39	2.50	8.25	2.75			
MAJOR CEMENT CO PO BOX 23740 DETROIT, MI 48223	4.50	5.50	7.00	8.00	2.50	5.95	8.25	155.00	165.00	155.00	120.00	0.39	0.39	2.50	8.25	2.75			

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City Engineering Division, D.P.W.										BID TABULATION - PAVING										City of Detroit			
Title: HMA RESURFACING AND MISCELLANEOUS CONSTRUCTION ON ALTER BETWEEN CHANDLER PARK & E JEFFERSON, MACK BETWEEN I-75 & RIOPELLE, E 7 MILE ROAD BETWEEN 1-75 & CONANT AND HARPER BETWEEN CADIEUX & I-94 CROSS OVER FOR THE DEPARTMENT OF PUBLIC WORKS																				Contract No. PW-6971			
Bids Opened: 4/9/15 (2:00 PM)					Bulletins Issued: 1					Compiled By: ads					Checked By: NYS					Sheet No. 5 of 5			
BIDDER	QUANTITIES AND UNIT PRICES																						
	8237050 __ WATER SHUTOFF, ADJ, MODIFIED	<div></div>																		02905959			
		<div></div>																		02905960			
		<div><input checked="" type="checkbox"/> Street <input type="checkbox"/> Alley</div>																					
	29																		TOTAL BID				
SFT																							
CADILLAC ASPHALT, LLC 2575 HAGGERTY ROAD, SUITE 100 CANTON, MI 48188		400.00																	\$3,831,534.94				
FORT WAYNE CONTRACTING, INC / AJAX PAVING INDUSTRIES, INC, A JOINT VENTURE 300 E SEVEN MILE ROAD DETROIT, MI 48203		300.00																	\$3,097,202.52				
MAJOR CEMENT CO PO BOX 23740 DETROIT, MI 48223		350.00																	\$4,152,040.00				
		Engineer's Estimate of Construction Cost										\$3,480,143.00		Low Bid		\$3,097,202.52							
		Low Bid is <input checked="" type="checkbox"/> Above <input type="checkbox"/> Below										\$382,940.48		Other Cost		\$774,797.48							

	Engineer's Estimate	11.00%	TOTAL PROJECT COST	\$3,872,000.00
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12SP604(A)

**MICHIGAN
DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION
FOR
QUALITY CONTROL AND ACCEPTANCE OF PORTLAND CEMENT CONCRETE
(FOR LOCAL AGENCY PROJECTS ONLY)**

C&T:JFS

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C&T:APPR:JAB:DBP:11-22-11
FHWA:APPR:11-29-11

a. Description. The Contractor must administer quality control (QC) and the Engineer will administer quality assurance (QA) procedures that will be used for acceptance of and payment for all Portland cement concrete (PCC) for the project. Except as explicitly modified by this special provision, all materials, test methods, and PCC mixture requirements of the standard specifications and the contract apply.

Provide the Engineer a minimum 24 hours notification prior to each concrete placement.

1. Terminology.

Air Content of Fresh Concrete. The recorded total air content of fresh concrete sampled and tested according to this special provision.

Air Content Test Results. The recorded total air content of fresh concrete that is used to mold corresponding strength test specimens for acceptance.

Alkali-Silica Reactivity (ASR). A chemical reaction which occurs over time within concrete between high alkaline cement paste and reactive forms of silica found in some aggregates. In the presence of moisture, an expansive ASR gel is formed which can exert pressure within the concrete, causing random cracking and premature deterioration of the concrete. See subsection c.5.A.

Concrete Mix Design. The process, by which the concrete mixture performance characteristics are defined, based on selected materials, performance requirements, environmental exposure considerations, placement methods, and other factors that control the plastic and hardened properties of the concrete in efforts to produce an economical and durable product.

Job Mix Formula (JMF). The actual batch quantities (mixture proportions) of each constituent included in the concrete mixture, based on adjustments to the target weights from the mix design, necessary to optimize the concrete mixture properties. Submit mix design and JMF on the MDOT Job Mix Formula (JMF) Concrete Field Communication form (MDOT Form Number 1976); include accompanying documentation.

Production Lot. A discrete cubic yard quantity of concrete containing the same JMF and used for the same application, as described in subsection d.2.

Pay Factor (PF). The factor that is determined according to the formula herein, used to calculate the price adjustment for a discrete quantity of concrete. Pay factor determination

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will be in accordance with the requirements in subsection d.3 and can not exceed 1.00. Therefore, there will never be a positive pay adjustment.

Quality Assurance (QA). Activities administered by the Engineer dealing with acceptance of the product, including, but not limited to, materials sampling, testing, construction inspection, and review of Contractor QC documentation. All concrete QA sampling and testing will be performed by the Agency. The Agency administered QA is described in section d of this special provision.

Quality Control (QC). All activities administered by the Contractor to monitor, assess, and adjust production and placement processes to ensure the final product will meet the specified levels of quality, including, but not limited to, training, materials sampling, testing, project oversight and documentation. Contractor administered QC is described in section c of this special provision.

QC Action Limits. A range of values established by the Contractor in the QC plan that, if exceeded, requires that corrective action be taken by the Contractor to restore the continuity and uniformity of the mixture and methods in conformance with specification requirements. The QC action limits must not exceed the QC suspension limits.

QC Plan. The project-specific plan developed by the Contractor describing, in detail, all aspects of production and construction for the project to ensure consistent control of quality to meet specification requirements.

QC Plan Administrator. An employee of, or consultant engaged by the Contractor, responsible for developing and overseeing all aspects of QC for the project. This includes, but is not limited to preparing the QC plan, managing the Contractor QC personnel, communicating routinely with the production personnel to ensure quality, initiating corrective action and suspending operations when the process is found to be producing non-conforming materials, and preparing and submitting all necessary QC documentation to the Engineer within the specified time period. The QC Plan Administrator must be a certified concrete technician (Michigan Level II), or have direct authority over a certified concrete technician (Michigan Level II) for the project.

QC Suspension Limits. A range of values defined in Table 1 that, if exceeded on a single QC test, requires that the Contractor suspend operations and determine, correct, and document the deficiencies before resuming production. The Engineer must approve all changes prior to resuming production. The QC suspension limit must not exceed specification requirement thresholds.

Sample. A representative quantity of concrete taken during production which is used to measure the quality characteristics for a respective production lot of concrete.

Sampling Rate. The number of times the fresh concrete is sampled by the Engineer for acceptance. The sampling rate will be determined by the Engineer as described in subsection d.2.B.

Small Incidental Quantity. A single day's placement of less than 20 cubic yards of concrete used for non-structural or non-pavement related applications, including, but not limited to: curb and gutter, sidewalks and sidewalk ramps (excluding driveways and driveway ramps), installing sign or fence posts, guard rail or cable rail foundations

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(excluding end anchorage foundations), or other contract items where the small quantity of concrete is not paid for separately, as directed by the Engineer. Price adjustment will not be applied to small incidental quantities provided all other provisions are met for the respective contract item. Requirements for small incidental quantity consideration are described in subsections c.5.G and d.2.B. The corresponding weekly QA 28-day compressive strength test results described in subsection d.2.B must meet specification limits defined in Table 2. ASR requirements specified in subsection c.5.A are not required for small incidental quantities.

Specification Limits. The threshold values defined in Table 2 assigned to each quality characteristic used to evaluate the quality of the material.

Strength Sample Test Result. A strength sample test result consists of the 28-day compressive strength of the 6-inch by 12-inch or 4-inch by 8-inch cylindrical strength test specimens. A strength sample test result is the average of the two companion strength test specimens taken from the same sample of concrete.

Strength Test Specimen. A strength test specimen is defined as each individual 6-inch by 12-inch strength test cylinder or 4-inch by 8-inch strength test cylinder molded and cured according to AASHTO T 23/ASTM C 31 and tested according to AASHTO T 22/ASTM C 39. All respective QC or QA strength test specimens must be the same nominal size.

Note: Strength test specimen cylinder size of 4-inch by 8-inch is permitted only if the nominal maximum coarse aggregate particle size, as specified for the coarse aggregate in the concrete mixture, is 1-inch, or less.

b. Materials. Mixture requirements must be in accordance with the contract.

c. Contractor Administered Quality Control (QC).

1. Contractor Quality Control Plan (QC Plan). Prepare, implement, and maintain a QC plan specific to the project for concrete that will provide quality oversight for production, testing, and control of construction processes. The QC plan must identify all procedures used to control production and placement including when to initiate corrective action necessary to maintain the quality and uniformity of the work.

Develop concrete mix designs and JMFs, as specified, and conduct QC sampling, testing, and inspection during all phases of the concrete work at the minimum frequency, or at an increased frequency sufficient to ensure that the work conforms to specification requirements.

Project-specific items and quality characteristics required in the QC plan include, but are not limited to the following:

- A. Organization chart.
- B. QC Plan Administrator and contact information.
- C. The name(s) and credentials of the QC staff.

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D. Methods for interaction between production and QC personnel to engage timely corrective action, including suspension of work.

E. Coordination of activities.

F. Documentation, procedures, and submittals.

G. Project and plant specifics.

H. Concrete production facilities inspections and certifications.

I. Current testing equipment calibration documentation including calibration factor.

J. Testing and initial field curing facilities for QC and QA strength test specimens (AASHTO T 23/ASTM C 31).

K. Stockpile management plan.

L. Corrective action plan.

M. Mixing time and transportation, including time from batching to completion of delivery and batch placement rate (batches per hour), along with the manufacturer's documentation relative to the batching equipment's capabilities in terms of maximum mixing capacity and minimum mixing time.

N. Placement and consolidation methods including monitoring of vibration, depth checks, and verification of pavement dowel bar alignment.

O. Process for monitoring stability of air content of fresh concrete during concrete production and placement.

P. Hot and cold weather protection considerations and methods.

Q. Control charts with action and suspension limits.

R. Verification for non-deleterious alkali-silica reactivity (see subsection c.5.A).

S. Mix design and JMFs.

T. Proposed location for use of each JMF on the project.

U. The frequency of sampling and testing.

V. Handling, protection, initial curing, and transporting of strength test specimens (AASHTO T 23/ASTM C 31).

W. Methods to monitor construction equipment loading and open-to-traffic strengths.

X. Finishing and curing procedure.

Y. Ride quality control.

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Submit the QC plan, for the appropriate items of work, to the Engineer for review a minimum of 10 working days before the start of related work. The Engineer will notify the Contractor of any objections relative to the content of the QC plan within 5 working days of receipt of the QC plan. Do not begin concrete placement before acceptance of the QC plan by the Engineer.

2. QC Records. Maintain complete records of all QC tests and inspections. Document what action was taken to correct deficiencies. Include sufficient information to allow the test results to be correlated with the items of work represented.

Furnish one copy of all QC records and test reports to the Engineer within 24 hours after the date covered by the record in a format acceptable to the Engineer. The Engineer will withhold acceptance of the concrete for failure to provide properly documented and timely QC records and reports.

If the Engineer is performing QA sampling and testing at the same time the Contractor is performing QC sampling and testing, all associated QC records must include the appropriate identification number that correlates with the Engineer's QA identification number.

3. Personnel Requirements. The QC Plan Administrator must have full authority and responsibility to take all actions necessary for the successful implementation of the QC plan, including but not limited to, the following:

A. Monitoring and utilizing QC tests, control charts, and other QC practices to ensure that delivered materials and proportioning meets specification requirements.

B. Monitoring materials shipped to the project, prior to their use, to ensure their continued compatibility toward producing consistent quality.

C. Periodically inspecting all equipment utilized in transporting, proportioning, mixing, placing, consolidating, finishing, and curing to ensure proper operation.

D. Monitoring materials stockpile management, concrete batching, mixing, transporting, placement, consolidation, finishing, and curing to ensure conformance with specification requirements.

E. Maintaining and submitting all QC records and reports.

F. Directing the necessary corrective action to ensure continual conformance within the QC action limits.

G. Suspending production for the project when suspension limits are exceeded.

H. Conducting or monitoring adjustments to the JMF.

Individuals performing QC tests must demonstrate that they are proficient and capable of sampling and testing concrete or aggregate, where applicable, in accordance with the associated test procedures and Agency requirements prior to commencement of related

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work. Any adjustments to the JMF must be made by a certified concrete technician (Michigan Level II).

4. QC Laboratory Requirements. Laboratories, including field laboratories and all associated testing equipment that prepare concrete mixes or perform QC testing, must demonstrate to the Engineer that they are equipped, staffed, calibrated, and managed so as to be capable of batching, and testing Portland cement concrete in accordance with the applicable test procedures. Mix designs and their accompanying JMFs must include a statement, signed by a certified concrete technician (Michigan Level II), that all applicable standard test methods have been followed in verifying the mix design and JMF.

5. Mix Design and Documentation. Design concrete mixtures meeting the requirements specified in Tables 601-2 and 701-1 of the Standard Specifications for Construction. Provide the grade of concrete for the section number reference application specified in Tables 601-2 and 701-1, or as specified in the contract. Request variance in writing when proposing a mix design and JMF that exhibits temperature, slump or air content other than those specified. Include the proposed mix design, JMF, and associated trial batch verification test data. Do not use a grade of concrete with a minimum specified 28-day compressive strength greater than what is designated for the application. The maximum water/cementitious ratio must not exceed 0.45.

The maximum slump for Grades P1 and P2 concrete is 3 inches or as documented on the approved JMF. All other grades of concrete will be according to Tables 701-1 A and B of the Standard Specifications for Construction

The specified air content of fresh concrete is 5.5 - 8.0 percent. Air content of fresh concrete less than 5.5 percent for concrete that lies in the finished work at least 3 feet below the surface of the ground or entirely under water will not be cause for rejection.

Use aggregates from only geologically natural sources.

Secure prior approval from the Engineer to use concrete intended for early opening to traffic to facilitate driveway gaps or other features necessary for required local access.

Unless specified otherwise, do not exceed 40 percent substitution by volume of the total cementitious materials with slag cement or fly ash. Use the combined weight of all cementitious materials to determine compliance with the maximum water-cementitious ratio and cementitious material content requirements specified above. Include provisions for cold and hot weather protection in the QC plan.

Use admixture dosage as indicated in the Qualified Products List to reduce mixing water. For night casting, where applicable, a water-reducing admixture may be used in lieu of a water-reducing and retarding admixture, provided the concrete can be placed and finished in the sequence specified on the plans prior to initial set, is not subjected to residual vibration, or is not within the areas influenced by dead load deflections as a result of adjacent concrete placement operations.

A. Alkali-Silica Reactivity. Provide documentation to the Engineer that the concrete mixture does not present the potential for excessive expansion caused by alkali-silica reactivity (ASR). Provide a Test Data Certification with the latest test results (valid for 2 years) conforming to the specified criterion for one of the following standard test

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methods ASR requirements specified in subsection c.5.A are not required for small incidental quantities.

(1) Method 1. ASTM C 1260. Mortar Bar Test. If the expansion of the mortar bars is less than 0.10 percent at 14 days of immersion, the fine aggregate is considered non-deleterious to ASR reactivity and may be used in the concrete without the need for ASR mitigation.

(2) Method 2. ASTM C 1293. Concrete Prism Test.

- If the expansion of concrete prisms is not greater than 0.040 percent after 1 year, the fine aggregate is considered non-deleterious to ASR reactivity and may be used in the concrete without the need for ASR mitigation.
- If the expansion of concrete prisms is greater than 0.040, but not exceeding 0.120 percent after 1 year, the fine aggregate is considered moderately deleterious to ASR reactivity and mitigation is required, as follows. A Low-Alkali cement with equivalent alkalis ($\text{Na}_2\text{O} + 0.658 \times \text{percent K}_2\text{O}$) not exceeding 0.60 percent may be used in the concrete mixture to mitigate the potential for ASR reactivity provided the total alkali content for the cementitious materials combination does not exceed 3.0 pounds per cubic yard (Na_2O equivalent).

(3) Method 3. ASTM C 1567. Mortar Bar Test. If no previous test data are available for the fine aggregate that shows it is resistant to ASR using either Method 1 or 2, above, replace 25 to 40 percent of the Portland cement in the concrete mixture with Class F fly ash or Slag Cement (Grade 100 minimum). A blended cement meeting the requirements of ASTM C 595 containing Portland cement and slag cement or Class F fly ash may also be used.

Demonstrate the ability of the fly ash or slag cement to control the deleterious expansion caused by ASR by molding and testing mortar bars according to the standard test method described in ASTM C 1567 using the mix proportions for both the aggregates and the cementitious materials proposed for the project. Make at least three test specimens for each cementitious materials-aggregate combination. If the average of three mortar bars for a given cementitious materials-aggregate combination produces an expansion less than 0.10 percent at 14 days of immersion, the JMF associated with that combination will be considered non-deleterious to ASR reactivity. If the average expansion is 0.10 percent or greater, the JMF associated with that combination will be considered not sufficient to control the deleterious expansion caused by ASR and the JMF will be rejected.

If the expansion exceeds the respective threshold limits for the ASTM used, then the Engineer will not approve the use of that concrete mixture.

B. Contractor Provided Mixes. Provide mix design and accompanying JMFs using the methods of verification included in this special provision. Include sufficient information on constituent materials and admixtures along with trial batch verified physical properties of the fresh concrete, mix proportions per cubic yard for all constituents and compressive strength test results necessary to allow the Engineer to fully evaluate the expected performance of the concrete mixture.

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(1) Mix Documentation. Prepare mix designs for each grade of concrete required on the project. Submit JMF for each mix design, including all required documentation, to the Engineer for review 10 working days before the anticipated date of placement. The Engineer will notify the Contractor of any objections within 5 working days of receipt of the mix documentation. Number or otherwise identify each JMF and reference all accompanying documentation to this number. Reference each JMF to the appropriate method of verification. Mix design and JMF submittals that do not include all required documentation will be considered incomplete and the Engineer will return them without review.

Provide all supporting mix documentation, including test reports and mix proportion adjustment calculations. All mix designs and accompanying JMFs must be traceable to a laboratory meeting the requirements of this special provision. Include the necessary documentation described in subsection c.5.

Submit mix design and JMF on the MDOT Job Mix Formula (JMF) Concrete Field Communication form (MDOT Form Number 1976); include accompanying documentation. List the source of materials, bulk density (unit weight) of coarse aggregate (rodding procedure or shoveling procedure), absorption of aggregates, relative density (specific gravity) of aggregates, aggregate correction factors, batch weights, and project specific or historical laboratory test data. Include the recorded air content of fresh concrete using the same admixture and cementitious material sources to be used in the production of the concrete for the project. The 28-day compressive strength and air content of fresh concrete for the concrete which is reported as part of the mix documentation submittal must meet the specification limits described in Table 2.

(2) Job Mix Formula (JMF). Select proportions for concrete mixtures according to ACI Standard 211.1. The volume of coarse aggregate per unit volume of concrete must be 65 to 75 percent, inclusive.

Four methods of verification of proposed JMF are acceptable.

(a) Method 1. Trial Batches. Base trial batches on the same materials and proportions proposed for use on the project. Prepare at least one trial batch for each mix design in sufficient time before starting concrete placement to allow for review according to subsection c.5.B.(1). Provide the results of temperature, slump, density (unit weight), air content of fresh concrete, 28-day compressive strength, and age of concrete at the time of strength testing, for a minimum of three independent samples. For JMF trial batch verification purposes only, 7-day compressive strength test results which report at least 70 percent of the specified 28-day minimum design strength will be sufficient documentation in lieu of 28-day compressive strengths. The average of at least two strength test specimens represents one compressive strength sample test result for each independent sample. A JMF will be considered approved for use only if all of the physical properties of the concrete (as described above) are within specification limits. Provide the necessary ASR documentation as described in subsection c.5.A.

(b) Method 2. Same Mix. Verification based on experience with the same mix design, JMF, and the same materials. Provide the results of temperature,

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slump, density (unit weight) air content of fresh concrete, 28-day compressive strength, and age of concrete at the time of strength testing, for a minimum of three independent samples. The average of at least two strength test specimens represents one compressive strength sample test result for each independent sample. Do not substitute material types or sources, including admixtures or cementitious materials, nor change mix proportions in the JMF. A JMF will be considered approved for use only if all of the physical properties of the concrete (as described above) are within specification limits. Provide the necessary ASR documentation as described in subsection c.5.A.

(c) Method 3. Similar Mix. Verification based on experience with a mix design and JMF similar to the proposed mix design that used similar coarse aggregate materials. Substitution of coarse aggregate source is permitted only if the new source is of the same geologic type and meets minimum physical properties as the original aggregate and conforms to the specification requirements for the respective application. Verify, prior to batching, that the proposed changes to the JMF will not affect the properties of the fresh concrete (slump, temperature, air content, density (unit weight), workability), nor result in excessive mortar bar expansion as a result of deleterious reactivity between the aggregates and cementitious materials as described in subsection c.5.A.

Provide the supporting laboratory test documentation as for Method 1. Include all material properties for the original and substituted aggregates. Submit calculations showing how the mix proportions in the JMF were adjusted, based on the documented differences in relative density (specific gravity), bulk density (unit weight) and absorption of the substituted aggregate sources, to produce a theoretical yield of 100 percent.

(d) Method 4. Annual Verification. At the Engineer's option, verification may be accepted annually for a concrete plant rather than on a project basis provided the sources and proportions of the constituent materials, including cementitious materials and source and types admixtures, do not change. If the project is the continuation of work in progress during the previous construction season and written certification is submitted to the Engineer that materials from the same source and with the same mixture properties are to be used, the Engineer may waive the requirement for annual renewal verification of the JMF for the project. Provide the necessary ASR documentation as described in subsection c.5.A.

C. Agency Provided Mixes. Unless otherwise specified in the contract, the Engineer will provide the concrete JMF for the following types of concrete regardless of the total quantity for the project.

- Structural concrete patching mixtures, mortar and grout.
- Prestressed concrete.
- Bridge deck overlay concrete mixtures.
- Project-specific concrete mixtures and grades not defined in Tables 601-2 and 701-1 of the Standard Specifications for Construction.

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D. Changes in Materials and Proportions. Any changing from one approved JMF to another for the same grade of concrete must have prior approval by the Engineer. Record all changes to JMF in the QC records along with the rationale for the change. Verify, prior to batching, that the proposed changes to the JMF will not affect the properties of the fresh concrete (slump, temperature, air content, density (unit weight), workability), nor result in excessive mortar bar expansion as a result of deleterious reactivity between the aggregates and cementitious materials as described in subsection c.5.A.

E. QC Sampling and Testing. Conduct startup sampling and testing for temperature, slump, density (unit weight), and air content on the first load. Do not place concrete until testing verifies that the fresh concrete properties have not exceeded the QC action and suspension limit thresholds specified in Table 1. Continue testing subsequent loads as described in the QC plan, for each grade of concrete delivered to the work site each day. The QC sampling and testing must be random and independent from the Engineer's QA sampling and testing.

Ensure that the curing facilities are on site and are equipped to provide the proper environment for initial curing of the QC and QA concrete strength test specimens.

Perform QC sampling and testing of the fresh concrete for air content loss at least once during each week of concrete production, or whenever QC tests have shown that QC action limits have been exceeded, whichever is more frequent. Sample and test a representative haul unit of concrete immediately after its discharge but before the paver or pump hopper, where applicable. Sample and test the concrete representing the same haul unit, again, after the paver or after discharge from the pump and after vibration, where applicable. If the difference in measured air content between the two test locations for the same concrete is greater than two percent air by volume of concrete, suspend operations and administer corrective action. Resume concrete placement only after taking the necessary corrective action to reduce the loss in air content of fresh concrete between the two test locations, as approved by the Engineer. Document the corrective action to be taken in the QC records and make the necessary changes to the QC plan, where applicable.

Concrete exceeding the maximum specification limits for slump or temperature must be rejected regardless of the total mixing time or number of mixing revolutions at the time of arrival to the project.

The Engineer may require the Contractor to administer additional QC sampling and testing if the Engineer determines the Contractor's current QC sampling and testing methodology is shown to be insufficient to ensure continual control of the quality of the concrete.

Take the appropriate corrective action, as described in the QC plan, when QC testing shows the QC action limits for any quality characteristic are exceeded. Suspend production if any of the QC suspension limits are exceeded or if the corrective action is not sufficient to restore the quality to acceptable levels.

Resume production only after making all necessary adjustments to bring the mixture into conformance with all applicable specifications and receiving approval to resume work from the Engineer. Document these adjustments in the QC records.

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Table 1: Action and Suspension Limits

Quality Characteristic	Action Limits	Suspension Limits
Air Content (percent)	As Defined in the Contractor QC Plan	< 5.5 or > 8.0
Air Content Loss (percent)		Greater than 2.0
Conc. Temp. (Deg. F)		< 45 or > 90 at time of placement
Slump (max.) (inch)		See subsection c.5
Density (unit weight)		N/A

F. Work Progress Test Specimens. Determine the strength of concrete for opening to construction traffic or regular traffic, for removing shoring and forms, or for other similar purposes in accordance with subsections 104.11, 601.03.H and 701.03.D of the Standard Specifications for Construction, and as approved by the Engineer. Cure work progress test specimens in the same manner as the in-situ concrete. Allow the Engineer to witness testing of work progress cylinder or beam specimens and non-destructive testing, including calibration tests.

For pavement repairs described in section 603 of the Standard Specifications for Construction, the maturity method may be used to determine the in-place, opening-to-traffic flexural strength, provided the necessary preliminary flexural strength versus opening-to-traffic time correlations, using the same materials and JMF, are established and approved by the Engineer before placing the concrete.

G. Reduced QC for Small Incidental Quantities. Reduced levels of on-site QC testing for concrete may be considered for small incidental quantities defined in subsection a.1 provided provisions for administering reduced QC testing and oversight are included in the approved QC plan and the following criteria are met.

(1) The small incidental quantity of concrete will be limited to a single day's concrete placement.

(2) The small incidental quantity is not an integral part of a structural load bearing element.

(3) The Engineer received written certification from the Contractor that the concrete supplier has a current QC plan in place and available for review upon request by the Engineer.

(4) The concrete supplier employs a certified concrete technician (Michigan Level II) available at the plant or on call during concrete placement to validate and authorize modifications to the concrete JMF, as necessary.

(5) Prior to the first concreting operation, concrete representing the JMF for the small incidental quantity has been sampled and tested by a certified concrete technician (Michigan Level I or II) to verify that, historically, the JMF produced a concrete mixture meeting the minimum requirements for density (unit weight), slump, air content, and strength. Annual verification may be acceptable provided there are no changes to the material types or sources, including cementitious materials and admixtures.

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(6) The Engineer verified that the temperature, slump, and air content conform to specification requirements at the start of the day's concreting operation associated with the small incidental quantity.

(7) The Engineer is notified and provided sufficient opportunity to witness concrete placement.

d. Agency Administered Quality Assurance (Acceptance).

1. Agency Quality Assurance Plan (QA plan). The Engineer will be responsible for administering the quality-based acceptance and will institute any actions necessary toward its successful implementation.

Acceptance of concrete for full-depth pavement repairs will be according to section 603 of the Standard Specifications for Construction.

The Engineer will develop and follow a QA plan. The Engineer will provide the QA plan to the QC Plan Administrator a minimum of 7 calendar days prior to the pre-production meeting. The QA plan will be reviewed at the pre-production meeting and any proposed changes will be documented.

The nominal QA strength test specimen size, defined in subsection a.1 will be noted in the QA plan.

A. Personnel Requirements. The personnel responsible for field inspection and for obtaining QA samples will possess the required qualifications to collect QA samples. Sampling will be performed by qualified personnel possessing the current applicable certification through the Michigan Concrete Association (Michigan Level I or II) or through the Michigan Concrete Paving Association (Level I or II) certified concrete technicians, or where applicable, (MCAT) certified aggregate technician.

B. QA Testing Correlation. The testing equipment and associated testing personnel for both the Engineer's QA and Contractor's QC will conduct side by side testing of the same concrete representing the first production placement for the project to verify correlation of both the Engineer's and the Contractor's test results for slump, temperature, and air content of fresh concrete. The temperature measuring devices used for QC and QA must correlate relative to each other within 2 degrees F. The Engineer will request an Independent Assurance Test in the event the air content results of two tests conducted between the Engineer's and the Contractor's testers differ by more than 1.0 percent air by volume of concrete.

C. Laboratory Facilities. The testing laboratory with responsibility for acceptance testing on this project is the Agency testing laboratory, or a qualified facility under the authority of the Engineer.

2. QA Sampling and Testing. The Engineer will conduct QA sampling and testing, monitor the Contractor's adherence to the QC plan, and inspect field placed materials. Initial approval is required prior to concrete placement for, temperature, slump and air content, and is based on the Engineer's observance of QC startup sampling and testing described in subsection c.5.E.

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A. **Production Lot Size and Make Up.** A production lot will be defined as a single day of concrete, or as determined by the Engineer. A production lot will not include more than one grade of concrete, concrete of the same grade having different specified slump or air content, or concrete of the same grade having different material sources, mix designs or JMFs.

B. **Sampling.** Representative QA sampling and testing will be determined by the Engineer during concrete placement. The sampling rate will be one sample per 50 cubic yards, approximately, plus or minus, based on the anticipated total quantity of concrete to be placed and site conditions, with a minimum of one sampling for each day of production.

At the option of the Engineer, small incidental quantities as defined in subsection a.1 may be accepted (visually inspected and noted on the Inspector's Daily Report) without daily 28-day compressive strength QA test specimens provided there is a current acceptable strength test history of the JMF for the project prior to placement of the small incidental quantity. One set of compressive strength QA test specimens will then be molded for each small incidental quantity JMF at least once per week during production, thereafter, as directed by the Engineer (note the test results or identification number for the corresponding weekly QA compressive strength test result on the Inspector's Daily Report for each small incidental quantity). Quality control testing and daily QA testing for temperature, slump, and air content are still required as described in subsection c.5.G.

Samples will be taken from the concrete at the location as close to its final placement into the forms or on the grade as practical.

Samples for acceptance will not be taken at the concrete production facility (batch plant), nor prior to discharge from a concrete pump (excluding tremie seal placement applications). Mix adjustments (beyond normal QC) to the haul unit selected for QA sampling and testing will not be permitted prior to QA sampling and testing. QA sampling will be random and without prior notification.

C. **Testing.** The location(s) within the project limits for QA testing of the fresh concrete and placement of curing facilities for initial curing of the 28-day compressive strength QA test cylinders will be determined by the Engineer in conformance with the following criteria:

(1) The elapsed time between obtaining the first and the final portion of the composite sample must not exceed 15 minutes.

(2) Testing for slump, temperature, and air content of fresh concrete must begin within 5 minutes after obtaining the final portion of the composite sample.

(3) Molding of the 28-day compressive strength QA test cylinders must begin within 15 minutes after obtaining the final portion of the composite sample.

(4) The concrete sample must be protected from the sun, wind, and other sources of rapid evaporation, and from contamination.

The Contractor will provide curing facilities equipped to ensure the proper environment for the Engineer's QA concrete strength test specimens during initial cure. Each initial

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cure facility must provide ventilation or insulation, where applicable, to ensure the ambient temperature surrounding the specimens is maintained according to AASHTO T 23. Failure by the Contractor to maintain the proper curing environment during initial cure will not be basis for rejection of QA samples. Each initial curing facility must be capable of being locked, using an Agency provided padlock. The Contractor will ensure that all initial curing facilities are accounted for at all time, and protected against, theft and damage. The Contractor will locate and secure each initial cure facility throughout the project limits in such a manner so as to minimize excessive transport of the test specimens prior to initial cure, as follows:

- Immediately after finishing molded specimens, the Engineer will move the QA concrete strength test specimens to the closest initial cure facility provided by the Contractor.
- Immediately after all QA concrete strength test specimens are placed into the cure facility and the proper initial curing conditions have been established, the Engineer will secure the facility using the Agency provided padlock. Access to the QA concrete strength test specimens, thereafter, must be coordinated with the Engineer and will only be permitted in the presence of the Engineer.
- The Engineer will transport the QA concrete strength test specimens within 48 hours after molding, but not prior to 8 hours after final set of the concrete, from the initial curing facility to the Agency designated testing laboratory for final curing and strength testing. The specimens will be protected with a suitable cushioning material to prevent damage from jarring during transport. The total transportation time must not exceed 4 hours prior to commencement of final curing.

D. QA Stop Production Criteria. The Engineer will issue a Notice of Non-Compliance with Contract Requirements (Form 1165) and concrete production must stop when one or more of the following are observed.

(1) The QA testing shows that one or more of the suspension limits for quality characteristics defined in Table 1 are in non-compliance.

(2) The QC plan is not being followed.

(3) Segregation, excessive slumping of unsupported slipformed edges, or other notable changes in the fresh concrete properties is observed that may prevent proper placement, consolidation and finishing, or compromise the performance or long-term durability of the finished product.

(4) The required curing system is not being applied in a timely manner, as specified by the contract.

(5) If the difference in measured air content between the two testing locations for the same concrete is greater than two percent air by volume of concrete, as follows:

(a) immediately after discharge but before the paver or pump hopper (where applicable), and

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(b) after the paver or discharge from the pump (where applicable).

The Engineer will issue a Notice to Resume Work (Form 1165) only after all necessary adjustments are made to restore conformance with all applicable specifications, and the appropriate documentation is made in the QC records.

E. QA Records. The Engineer will maintain a complete record of all QA tests and inspections. The records will contain, as a minimum, signed originals of all QA test results and raw data, and resulting calculations. The QA test results will not be provided to the Contractor until the corresponding QC test results are received by the Engineer.

3. Pay Factor Determination and Price Adjustment. The Engineer's QA test results will be used to determine the pay factor (PF) and price adjustment (ADJ). The Contractor's QC test results will not be used for pay factor and price adjustment analysis. The Engineer will complete pay factor and price adjustment analysis within 7 days after completion of all 28-day compressive strength testing for the representative production lot.

Table 2: Specification Limits

Quality Characteristic	Specification Limits
Air Content (percent)	5.5 – 8.0
Conc. Temp. (Deg. F)	45 - 90 at time of placement
Slump (max.) (inch)	See subsection c.5
28-day Compressive Strength	LSL, subsection c.5
Rejection Limit - Lower 28-day Compressive Strength	0.75 x (LSL)

The specification limits for the fresh concrete properties are defined in subsection c.5. Concrete not conforming to the requirements specified in subsection c.5 may be rejectable and subject to further evaluation, as directed by the Engineer.

Use the following formula to calculate the PF and associated price ADJ for each concrete item.

$$PF = \frac{\text{Tested Strength}}{LSL}$$

$$ADJ = (PF-1) (\text{Price})$$

Tested Strength = QA 28-day compressive strength sample test result

LSL = Lower specification limit (Minimum Design Strength, see subsection c.5)

PF = Pay Factor (carried to two decimal places, not to exceed 1.00)

ADJ = Price adjustment to be applied to the quantity represented by the QA test

Price = Contract unit price bid for the pay item

4. Re-evaluation of Rejectable Concrete. If the tested strength does not achieve the lower rejection limit specified in Table 2, the associated concrete will be rejected and the Engineer will require additional evaluation to decide what further action may be warranted. If the Engineer determines that non-destructive testing (NDT) or coring is necessary, this work will be done by the Contractor in the presence of the Engineer within 45 days from

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concrete placement. All costs associated with this work will be borne by the Contractor. The Engineer will take custody of all cores intended for re-evaluation immediately after coring. If NDT is used to estimate the in-situ strength, a calibrated relationship between the concrete mixture and the NDT apparatus must have been established prior to NDT testing according to its respective standard test method. Test results from re-evaluation of rejectable concrete using NDT or coring will not be used for pay factor (PF) and price adjustment (ADJ) purposes. If the results from re-evaluation confirm that the lower rejection limit for 28-day compressive strength has been achieved, the represented quantity of concrete will remain in place and a pay factor (PF) of 0.75 will be applied for price adjustment (ADJ) determination. However, if the results from re-evaluation confirm that the lower rejection limit for 28-day compressive strength has not been achieved, as described above, the Engineer will elect to do one of the following.

A. Require removal and replacement of the entire represented quantity of concrete with new initial tests and pay factor and price adjustment analysis procedure conducted.

B. Allow the represented quantity of concrete to remain in place and apply an adjustment of minus 50.00 percent to all concrete items in the lot.

C. Allow the Contractor to submit a plan for corrective action for the Engineer's approval, to address the disposition of the rejectable concrete. If the Engineer does not approve the plan for corrective action, subsection d.4.A or d.4.B will be applied.

e. **Measurement and Payment.** If a price adjustment is made for reasons included in this special provision, that adjustment will be made using the original unit price bid for the specific item. If a contract unit price requires adjustment for other reasons not described in this special provision, the adjustments will be made using the original unit price and the adjustments will be cumulative.

Separate payment will not be made for providing, implementing, and maintaining an effective QC program. All costs associated with this work will be included in the applicable unit prices for the concrete items. Failure by the Contractor to maintain the proper curing environment during initial cure will not be basis for claim against the Agency.

All costs associated with providing, locating, relocating, maintaining, and securing the adequate number of portable curing facilities for the project, necessary to provide sufficient initial curing for the Contractor's QC and Engineer's QA strength test specimens will be included in the applicable unit prices for the concrete items. No additional payment will be permitted. The Contractor is responsible for damage, theft, subsequent replacement, and removal after completion of the work for each curing facility used on the project.

City of Detroit
SPECIAL PROVISION
FOR
HAND SPRAYED WATERBORNE PAVEMENT MARKINGS

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TED: JF

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I. Description. Prepare pavement surfaces and apply by hand wand retro-reflectorized white or selectively colored waterborne pavement markings including legends, symbols, crosswalks, stop bars and miscellaneous lines. Complete this work according to this special provision, the project plans, the 2012 Michigan Department of Transportation Standard Specifications for Construction, and as directed by the Engineer.

II. Materials. Select waterborne pavement marking material from the Qualified Products List (QPL). Use standard glass beads as called for in Section 920 of the Standard Specifications for Construction except as noted in this provision:

A. General:

1. All material used in the formulation of the pavement marking paint shall meet the requirements herein specified. Any materials not specifically covered shall meet the approval of the engineer.

B. Composition Requirements:

1. The pavement marking paint shall be a ready-mixed, one component, water-borne traffic quality paint, of the correct color, to be applied to either asphaltic or Portland cement concrete pavement. The composition of the paint shall be determined by the manufacturer. It will be the manufacturer's responsibility to produce a pigmented water-borne paint containing all the necessary co-solvents, dispersant, wetting agents, preservatives and all other additives, so that the paint shall retain its viscosity, stability and all of the properties as specified herein. The manufacturer shall certify that the product does not contain mercury, hexavalent chromium, toluene, chlorinated solvents, hydrolysable chlorine derivatives, ethylene-based glycol ethers and their acetates, nor any carcinogen, as defined in 29 CFR 1910.1200. The certification shall indicate a lead content not exceeding 0.06 percent by weight of the dry film, and the test for chromium content shall be negative.

2. **No glass beads will be allowed in the pavement marking paint. Glass beads will be applied after the paint has been applied.**

C. Manufacturing Formulations: The manufacturer shall formulate the pavement marking paint in a consistent manner and notify the engineer of any change of formulation. The formulation of the paint shall be determined by the manufacturer. It will be the manufacturer's responsibility to formulate paint which will meet the quantitative and qualitative requirements of this specification. Any change in the formulation of the paint must be approved by the CITY and Michigan Department of Transportation.

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FOR
HAND SPRAYED WATERBORNE PAVEMENT MARKINGS**

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Rev: 02/14/08 PAINTED PAVEMENT MARKINGS 02520 - 2 D. Quantitative Requirements of Mixed Paints:	<u>White</u>	<u>Yellow</u>
Pigment: Percent by weight, ASTM D 3723, Allowable variation from qualifying sample	± 2.0	± 2.0
Non-Volatile Content: Percent by weight, ASTM D 2369, allowable variation from qualifying sample	± 2.0	± 2.0
Viscosity: Krebs Units at 77 ± 1° F, ASTM D 562	70 – 85	70 – 85
Weight per Gallon: Pounds per gallon 77 ± 1° F, ASTM D 1475P, allowable variation from qualifying sample	± 0.3	± 0.3
Vehicle Composition: Vehicle Infrared Spectra, ASTM D 2621, allowable variation from qualifying sample	None	None
pH: ASTM E 70, Allowable variation from qualifying sample	± 1.0	± 1.0
Fineness of Dispersion: HEGMAN, minimum, ASTM D 1210	3.0	3.0
Volatile Organic Compounds: Pounds per gallon of paint, maximum, ASTM D 3960 according to 7.1.2.	2.1	2.1
Flash Point: Degrees F., minimum, ASTM d 93, Method A	100	100
Dry Time to No Pick Up: With no beads: minutes, maximum, ASTM D 711	10	10
Dry Through Time: Minutes, ASTM D 1640 except no thumb pressure is used when thumb is rotated 90° on paint film	20	20
Flexibility: TT-P-1952D	Pass	Pass

The material must be shipped to the job site in sturdy containers plainly marked with the Manufacturer's name and address, the color of the material, date of manufacture and batch number.

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FOR
HAND SPRAYED WATERBORNE PAVEMENT MARKINGS

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Provide certification to the Engineer from the waterborne manufacturer documenting the Contractor's qualifications to place the product in a manner acceptable to the manufacturer and in compliance with the provisions of this specification.

Provide technical data from the manufacturer regarding material type and application rate to the Engineer prior to starting work.

III. Construction.

1. **Placement.** Place waterborne materials and beads according to this specification and the waterborne manufacturer's requirements. Applied markings shall be sharp and well defined and shall provide uniform application of beads.
2. **Surface Preparation.** Surface preparation requirements are dependent on surface conditions. Notes A through E apply to the application of recessed lines, non-recessed lines and special makings, as noted:
 - A. **New hot mix asphalt (HMA)** - "New" HMA has no oil drips, residue, debris, or temporary or permanent markings. **Preparation required: Non-recessed lines and special markings-** Scarify the proposed marking area using non-milling grinding teeth or shot blasting.
 - B. **New Portland cement concrete (PCC)** - "New" PCC has no oil drips, residue, and debris, temporary or permanent markings. **Preparation required: Non-recessed lines and special markings-** Remove curing compound; to be paid for separately as Removing Curing Compound.
 - C. **Existing HMA or PCC surface** - There may be oil drip areas and/or debris, but no existing markings. **Preparation required: Non-recessed lines and special markings-** Scarify the proposed marking area using non-milling grinding teeth or shot blasting.
 - D. **Existing HMA or PCC surface with existing non-waterborne marking** - There may be oil drips and debris. There will be an existing non-waterborne marking. **Preparation required: Non-recessed lines and special markings-** Completely remove non-waterborne markings; to be paid for as Removal of Special Markings or Removal of Longitudinal Lines.
 - E. **Existing surface with existing waterborne marking-HMA or PCC** - There may be oil drip areas and or debris where there is an existing waterborne marking. **Preparation required: Non-recessed lines and special markings:** Scarify the proposed marking area using non-milling grinding teeth or shot blast or clean chemically per manufacturer's recommendations.

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HAND SPRAYED WATERBORNE PAVEMENT MARKINGS**

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Occasionally an existing waterborne marking may require complete removal. When the Engineer decides complete removal is required, it will be paid for as Removal of Special Markings or Removal of Longitudinal Lines.

Conduct grinding, scarifying, sandblasting, shot blasting, or other operations in such a manner that the finished pavement surface is not damaged and does not exhibit a pattern that will mislead or misdirect the motorist. Use vacuum-type equipment or equivalent to collect and contain debris generated by this operation.

When surface preparation is complete, broom the pavement surface, and follow with compressed air cleaning to remove all residue and debris resulting from the preparation work. Control and minimize airborne dust and similar debris generated by surface preparation and cleanup to prevent a hazard to motor vehicle operation or nuisance to adjacent property.

Do not damage transverse and longitudinal joint sealers on HMA and PCC surfaces when performing removal and cleaning work.

3. **Temperature Limitations.** Use the temperature limitations recommended by the waterborne Manufacturer. Document the temperature at the start of each day of marking operation and at any other time deemed necessary by the manufacturer or the Engineer.

IV. Delayed Acceptance. See special provision "03S811 (B)", from the Michigan Department of Transportation for specific regulations.

V. Measurement and Payment. The completed work as described will be paid for at contract unit price for the following contract items (pay items):

Contract Item (Pay Item)	Pay Unit
"Pavt Mrkg, Waterborne, Bike Symbol and Arrow, White"	Each
"Pavt Mrkg, Waterborne, Bike Arrow, White"	Each

The contract unit price for each of these items includes all labor, material, equipment, and traffic control. Payment also includes the costs associated with corrective action as referred to in section (IV) of this special provision. Removing curing compound or existing pavement markings will be paid for separately as described in section (III.2) of this special provision.

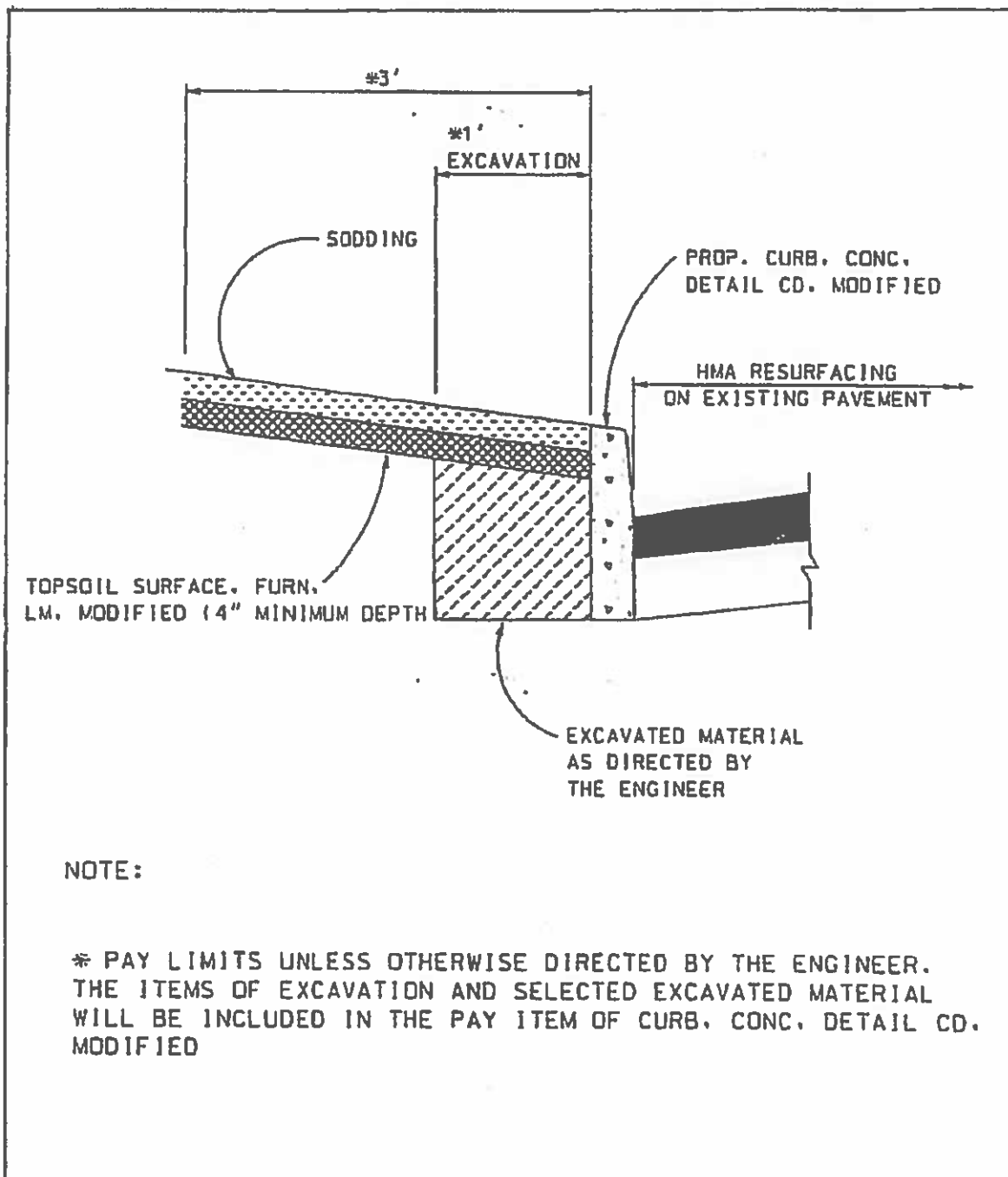
B A	<div style="text-align: center;"> TYPICAL CROSS SECTION COLD MILLING HMA SURFACE AND RESURFACING </div>	<div style="text-align: center;"> TYPICAL CROSS SECTION COLD MILLING HMA SURFACE AND RESURFACING </div> <p>NOTES:</p> <ol style="list-style-type: none"> 1. THE CONTRACTOR SHALL PLACE ADDITIONAL HMA MIXTURE AT VARIOUS LOCATIONS WHERE NEEDED, IN ORDER TO MAKE A UNIFORM CROSS-SECTION. AN ADDITIONAL 10% OF HMA 5E HAS BEEN ESTIMATED TO PROVIDE MATERIAL TO RE-ESTABLISH THE PAVEMENT CROSS-SECTION AND FOR WEDGING AT MILLED STREET INTERSECTIONS. 2. "COLD MILLING HMA SURFACE, MODIFIED" SHALL APPLY ACROSS THE FULL PAVEMENT WIDTH AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER. 3. IF EXISTING HMA OVERLAY IS LESS THAN 3 1/2", COLD MILL THE FULL DEPTH OR AS DIRECTED BY THE ENGINEER. <p>PROJECT SUMMARY:</p> <p>COLD MILL 3 1/2 INCHES OF EXISTING HMA SURFACE AND REPLACE WITH 2 INCHES OF 4E HMA LEVELING COURSE MIXTURE WITH A YIELD OF 220 LBS PER SQUARE YARD AND 1 1/2 INCHES OF 5E HMA WEARING COURSE MIXTURE WITH A YIELD OF 185 LBS PER SQUARE YARD. THE PROJECT ALSO INCLUDES CONCRETE CURB, SIDEWALK, CURB RAMP, DRIVEWAY APPROACHES, DRAINAGE STRUCTURES, EXCAVATION, PAVEMENT REMOVAL, LANE TIES, PAVEMENT MARKINGS AND UNCELLULATED CONSTRUCTION.</p>			
HMA APPLICATION ESTIMATE					
I.D. No.	Item	Rate Per syd	Est. Thick.	Performance Grade	Remarks
HMA, 5E	HMA mix. -5E	165 lb	1 1/2 INCHES	64-22	USE 5E FOR WEDGING
HMA, 4E	HMA mix. -4E	220 lb	2 INCHES	64-22	
HAND PATCHING	HMA mix. -5E	330 lb	3 INCHES	64-22	
HMA APPROACH, MODIFIED	HMA mix. 5E & HMAX mix. 4E	165 lb	1 1/2 INCHES	64-22	FOR RATE AND PG SEE HMA APPLICATION ESTIMATE
HMA SHOULDER, MODIFIED	HMA mix. -5E	220 lb	2 INCHES	64-22	
		330 lb	3 INCHES	64-22	
HMA Band Coat at the rate of 0.05 to 0.15 Gal./Syd. -Included in the pay item "HMA, 4E" Also Applies to HMA Approaches for Street Intersections					

DESIGNED BY K.S.M.	APPROVED
PLACED BY	APPROVED
CHECKED BY J.J.	APPROVED

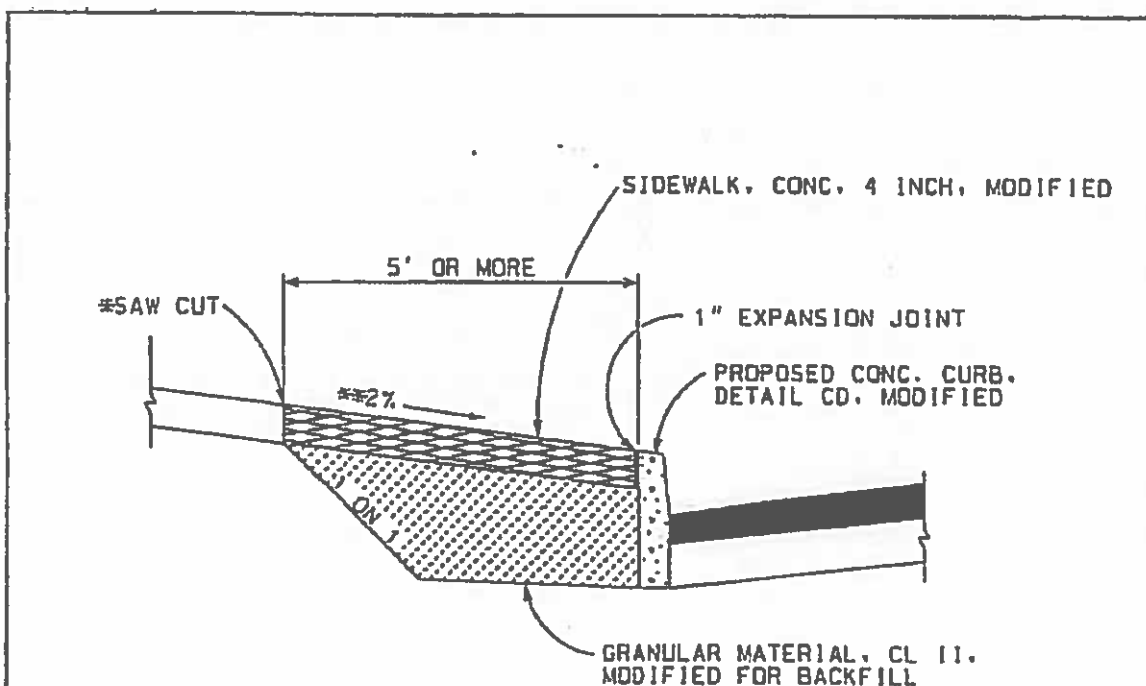
**TYPICAL CROSS SECTION
COLD MILLING HMA
SURFACE AND RESURFACE**

CITY OF DETROIT	
City Engineering Division	
Job No.	
Dwg. No.	
Date	JUNE, 09

<table border="1"> <tr> <td>B</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>A</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		B						A						<div style="text-align: center;"> <h1>HMA</h1> <h2>FEATHERING</h2> <h3>DETAIL</h3> </div>	CITY OF DETROIT City Engineering Division
B															
A															
REVISION _____		Job No.													
DRAWN BY K.S.M. APPROVED _____ TRACED BY _____ APPROVED _____		Drwg. No.													
CHECKED BY J.J. APPROVED _____ CITY ENGINEER		Date DEC. 06													



B A										CURB REPLACEMENT AREAS WITH LAWN ABUTTING CURB	CITY OF DETROIT City Engineering Division	
SECTION		Sho	DM	Appl	Sho						Job No.	
DESIGNED BY		K.S.M.		APPROVED							Drwg. No.	
CHECKED BY				APPROVED							Date	
DESIGNED BY		N.H.		APPROVED		CITY ENGINEER					JAN. 06	



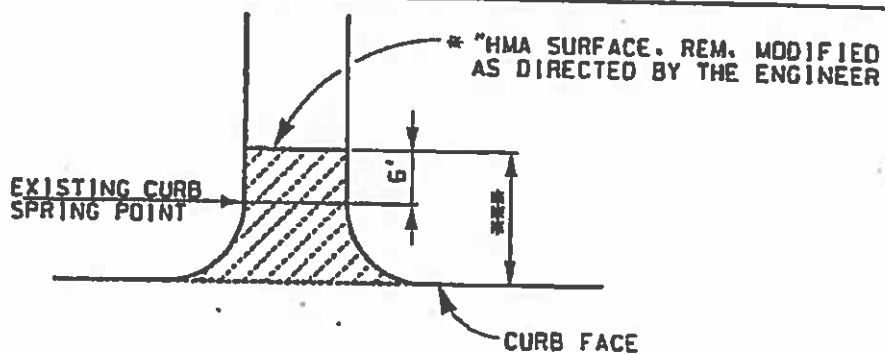
NOTE:

* IF SAWCUT IS LESS THAN 5'+ FROM BACK OF CURB, CONCRETE CURB AND CONCRETE SIDEWALK SHALL BE CONSTRUCTED INTEGRALLY. THE ITEMS OF SAW CUT AND 1" EXPANSION JOINT WILL BE INCLUDED IN THE PAY ITEM OF SIDEWALK, CONC. 4 INCH OR 6 INCH, MODIFIED.

THE ITEM OF GRANULAR MATERIAL, CL 11, MODIFIED UNDER CONCRETE SIDEWALK WILL BE PAID FOR WHEN CONCRETE SIDEWALK IS CONSTRUCTED IN THE BERM AREA BETWEEN THE CURB AND EXISTING SIDEWALK.

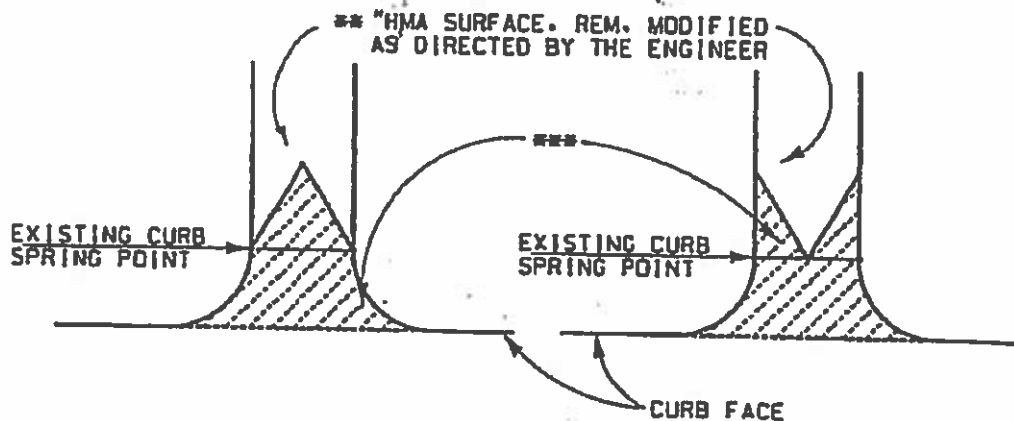
** SIDEWALK SLOPE SHALL BE 2% UNLESS OTHERWISE APPROVED BY THE ENGINEER.

B									
A		ADDED 2% S/W SLOPE		K.S.M.		J.S.		12/06	
		REVISION		Rev		C.M.		App'd	
		REVISED BY							
DRAWN BY		K.S.M.		APPROVED					
CHECKED BY				APPROVED					
DESIGNED BY		N.H.		APPROVED		CITY ENGINEER			
CURB REPLACEMENT AREAS WITH CONCRETE SIDEWALK ABUTTING CURB									
CITY OF DETROIT City Engineering Division									
Job No.									
Drwg. No.									
Date JAN. 06									



*** RESURFACING STREET RETURNS SHALL BE PAID FOR AS "HMA APPROACH, MODIFIED"

- * REMOVING HMA SURFACE AREA MAY BE A $6' \pm$ WIDE STRIP BACK OF THE SPRING POINT (SOLID LINES) OR THE ENTIRE RETURN AREA (SOLID AND DASHED LINES) AS DIRECTED BY THE ENGINEER.



- ** REMOVING HMA SURFACE AREA MAY BE DEFINED BY TRIANGULAR CUTS SHOWN OR MAY OTHERWISE VARY AS DIRECTED BY THE ENGINEER TO SATISFY CROWN TRANSITION OR DRAINAGE CONDITIONS.

(THESE DETAILS SHALL BE USED AT MAJOR CROSS STREETS AND ELWHERE AS DIRECTED BY THE ENGINEER.)

BY					
DATE					
DESCRIPTION					
REVISION NO.					
DRAWN BY	K.S.M.	APPROVED			
CHECKED BY		APPROVED			
ENGINEER BY	J.J.	APPROVED			

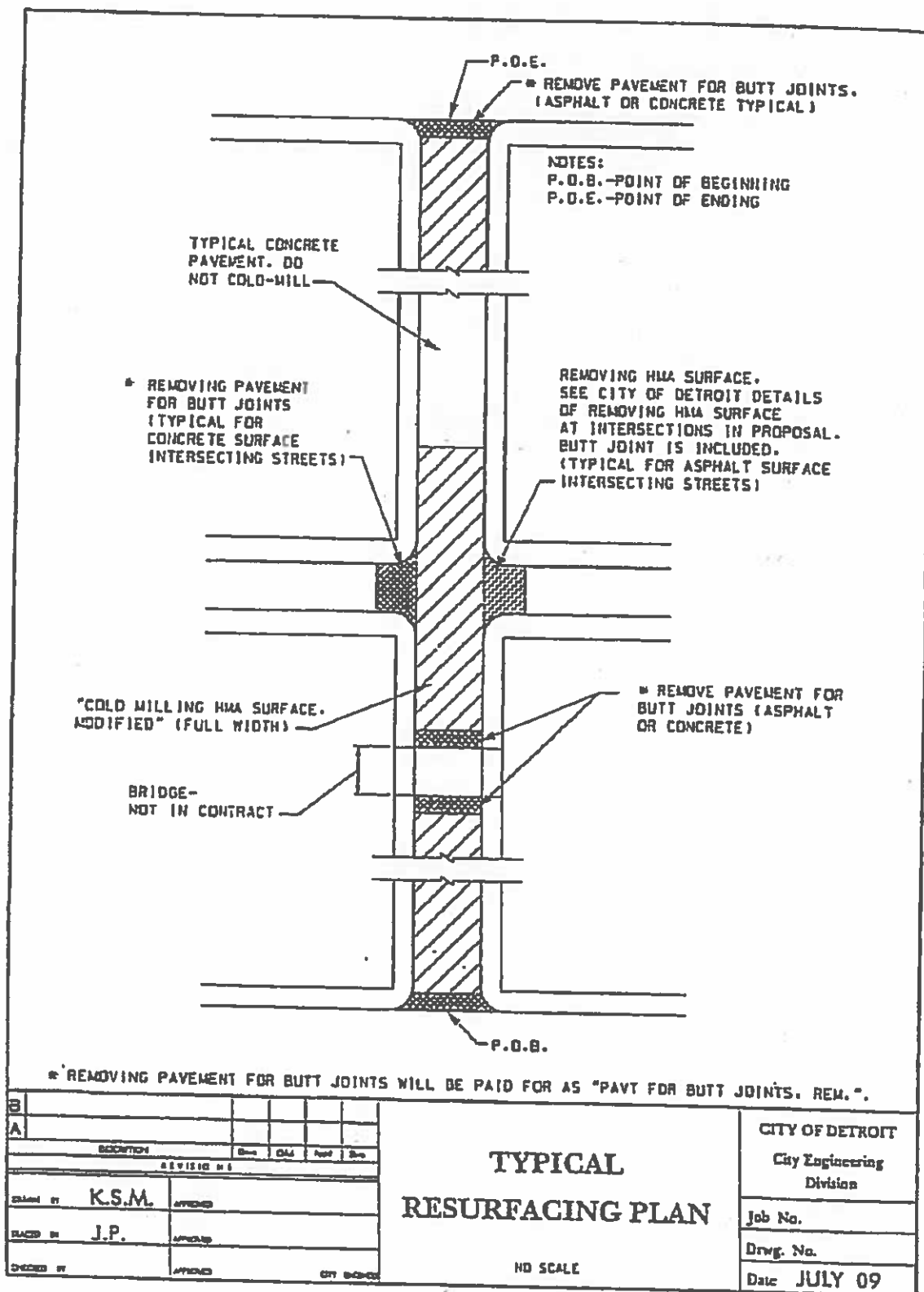
**HMA APPROACH,
MODIFIED**

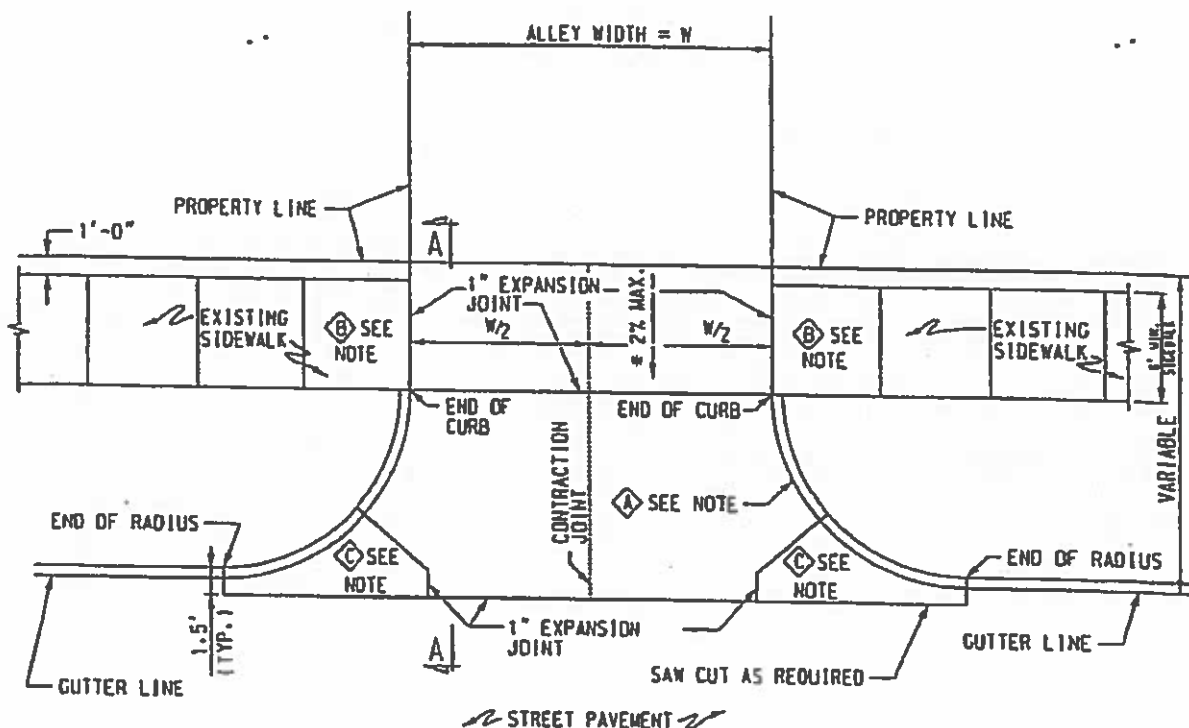
CITY OF DETROIT
City Engineering
Division

Job No.

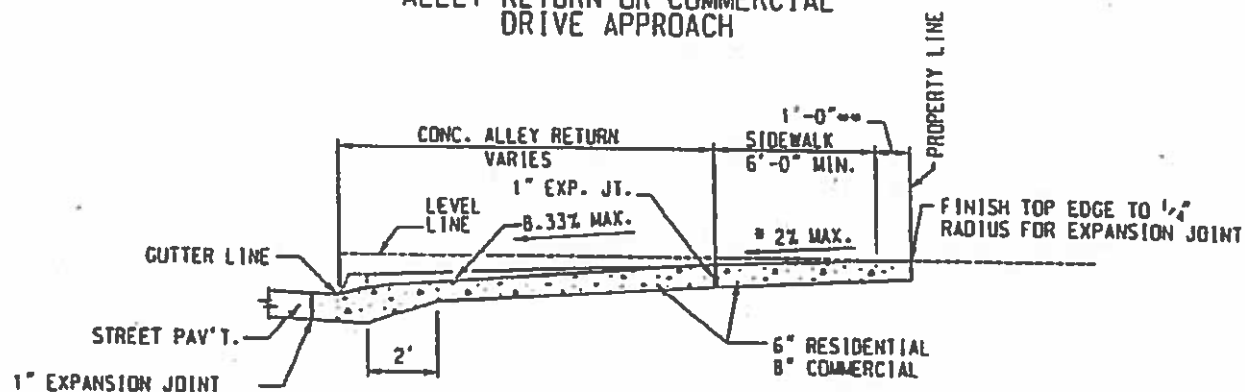
Drwg. No.

Date DEC. 06





ALLEY RETURN OR COMMERCIAL DRIVE APPROACH



SECTION A-A

C					
B	• SIDEWALK CROSS SLOPE	KSM	J.J.		2/1/01
A	METRIC TO ENGLISH UNIT SYSTEM	KSM	M.S.	H.K.	12/02
REVISIONS					
	DESCRIPTION	Drawn	Check	App'd	Date



PREPARED BY

K.S.M.

DRAWN BY:

J.J.

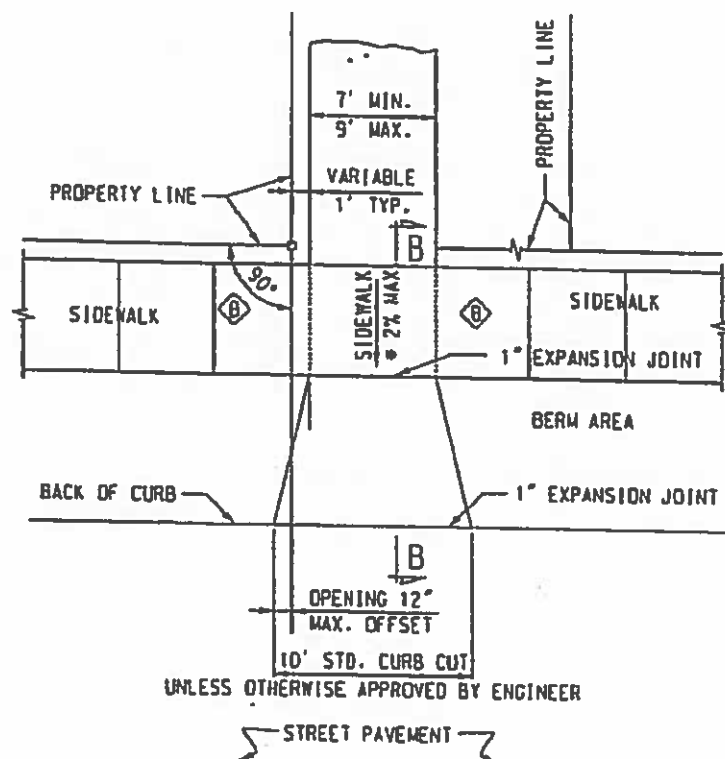
APPROVED

Sam Patel

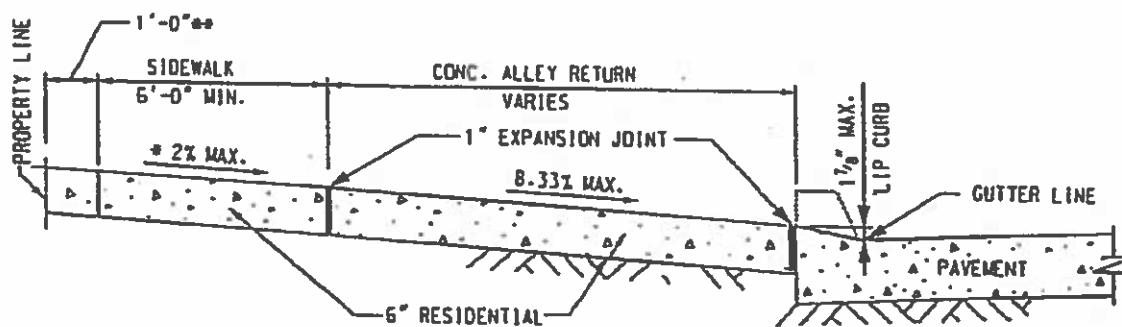
ENGINEER OF STREETS

HEAD ENGINEER

CITY OF DETROIT
CITY ENGINEERING DIVISION, D.P.W.
STANDARD PLAN FOR
DETAIL OF ALLEY RETURN
AND DRIVE APPROACH



DETAIL OF CURB CUT OPENINGS
FOR RESIDENTIAL DRIVEWAY



SECTION B-B

NOTES:

IF ALLEY IS PAVED, CONSTRUCT RETURN WITH 1" EXPANSION JOINT ON PROPERTY LINE.

Ⓐ RADIUS TO BE 10' UNLESS OTHERWISE SHOWN ON PAVING PLAN.

Ⓑ SIDEWALK FLAGS ABUTTING ALLEY SHALL BE 6" THICK. SIDEWALK SHALL BE REPLACED FOR A SMOOTH TRANSITION AND TO ATTAIN A CROSS SLOPE OF 2% MAX. OR AS DIRECTED BY THE ENGINEER.

Ⓒ KEY JOINT OR "B" JOINT IF REINFORCED PAVEMENT.

ALL DIMENSIONS ARE IN INCHES (") UNLESS OTHERWISE NOTED.

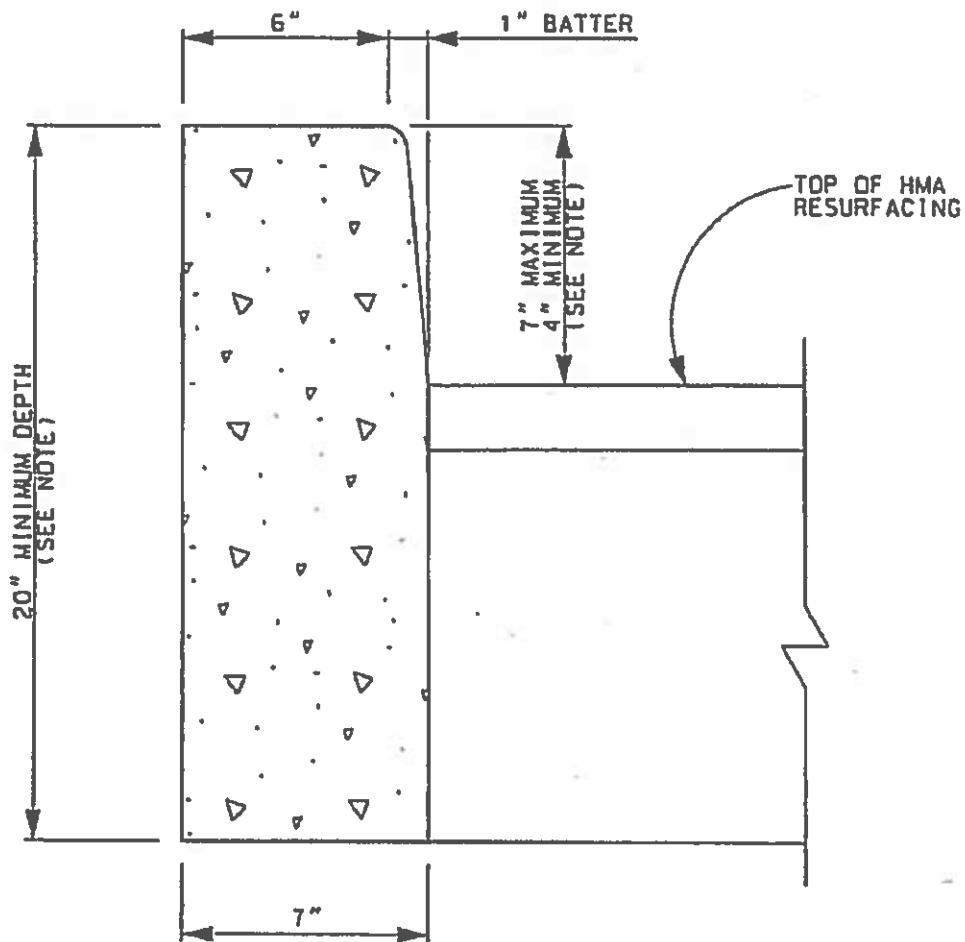
* SIDEWALK CROSS SLOPE SHALL BE 2% MAX. OR AS DIRECTED BY THE ENGINEER.

** THE SLOPE OF THE DRIVEWAY IN THE 1 FT. SPACE ADJACENT TO THE PROPERTY LINE MAY BE ALTERED UP TO 10% TO MEET EXISTING CONDITIONS

C				
B	* SIDEWALK CROSS SLOPE	KSM	J.J.	2/7/87
A	Chgd. THICKNESS NOTE	KSM	N.H.	W.T. 10/06
DESCRIPTION		Drawn	Check	App'd

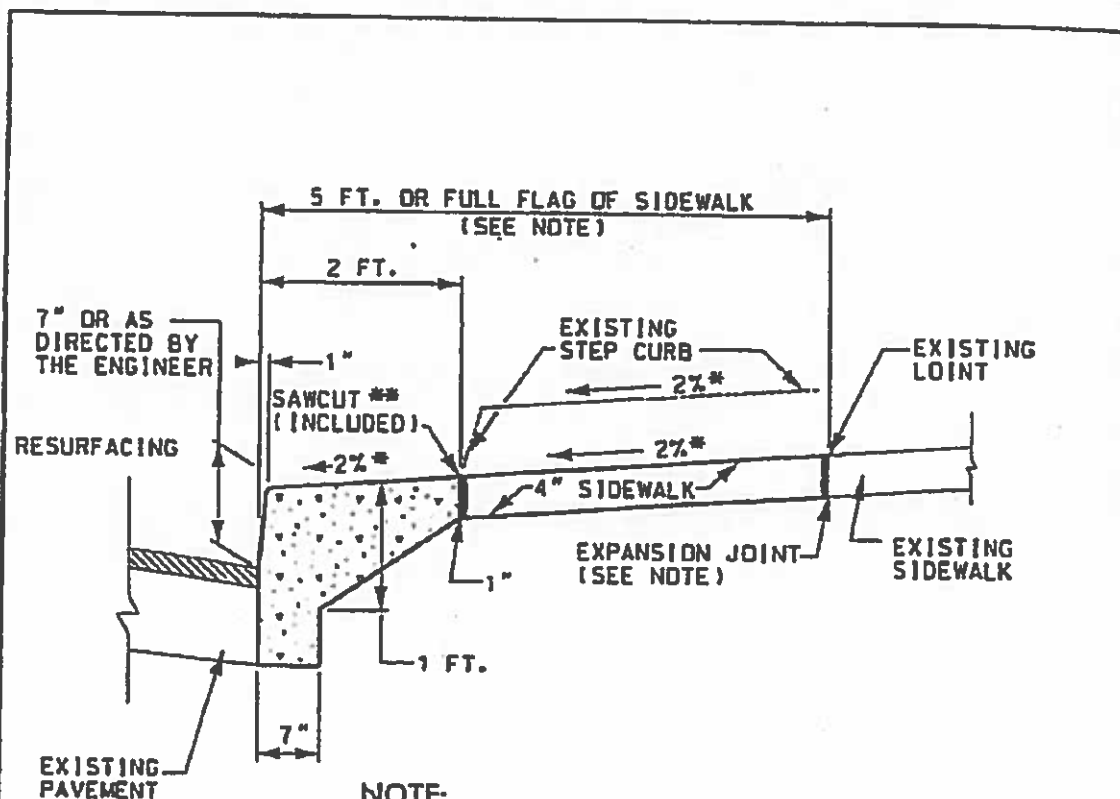
REVISIONS

CITY OF DETROIT
CITY ENGINEERING DIVISION, D.P.W.
STANDARD PLAN FOR
DETAIL OF ALLEY RETURN
AND DRIVE APPROACH

**NOTE:**

DEPTH OF CURB SHALL BE 20" UNLESS OTHERWISE
DIRECTED BY THE ENGINEER.

B					
A					
REVISION		Rev	Qty	Unit	Qty
REVISED IN 3					
DESIGN BY	K.S.M.	APPROVED			
CHECK BY		APPROVED			
DESIGN BY	N.H.	APPROVED	CITY ENGINEER		
CURB, CONC., DETAIL CD, MODIFIED			CITY OF DETROIT		
			City Engineering Division		
			Job No.		
			Drwg. No.		
			Date JAN. 06		

**NOTE:**

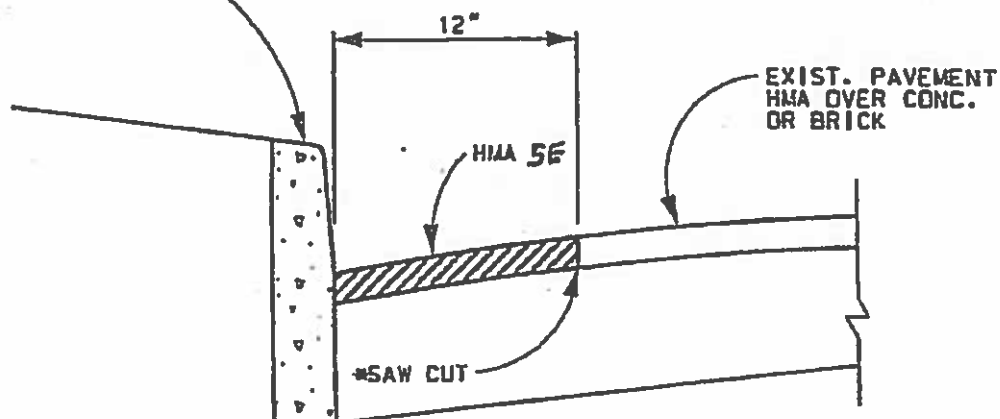
WHERE THE WIDTH OF THE NEW INTEGRAL CURB AND SIDEWALK IS MORE THAN 2 FT., PROVIDE A 1" EXPANSION JOINT ALONG THE 2 FT. WIDTH OR AS DIRECTED BY THE ENGINEER.

* SIDEWALK SLOPE SHALL BE 2% UNLESS OTHERWISE APPROVED BY THE ENGINEER.

** SAWCUT IS INCLUDED IN THE PAY ITEM INTEGRAL CURB AND SIDEWALK, 2 FEET MODIFIED.

B							
A							
LOCATION		Dist	City	State	County		
DESIGNED BY							
DESIGNED BY	K.S.M.	APPROVED					
CHECKED BY	J.P.	APPROVED					
DRAWN BY		APPROVED					
		CITY ENGINEER					
REPLACES SAME TITLE 1/06							
INTEGRAL CURB AND SIDEWALK						CITY OF DETROIT	
						City Engineering Division	
						Job No.	
						Dwg. No.	
						Date JULY 09	

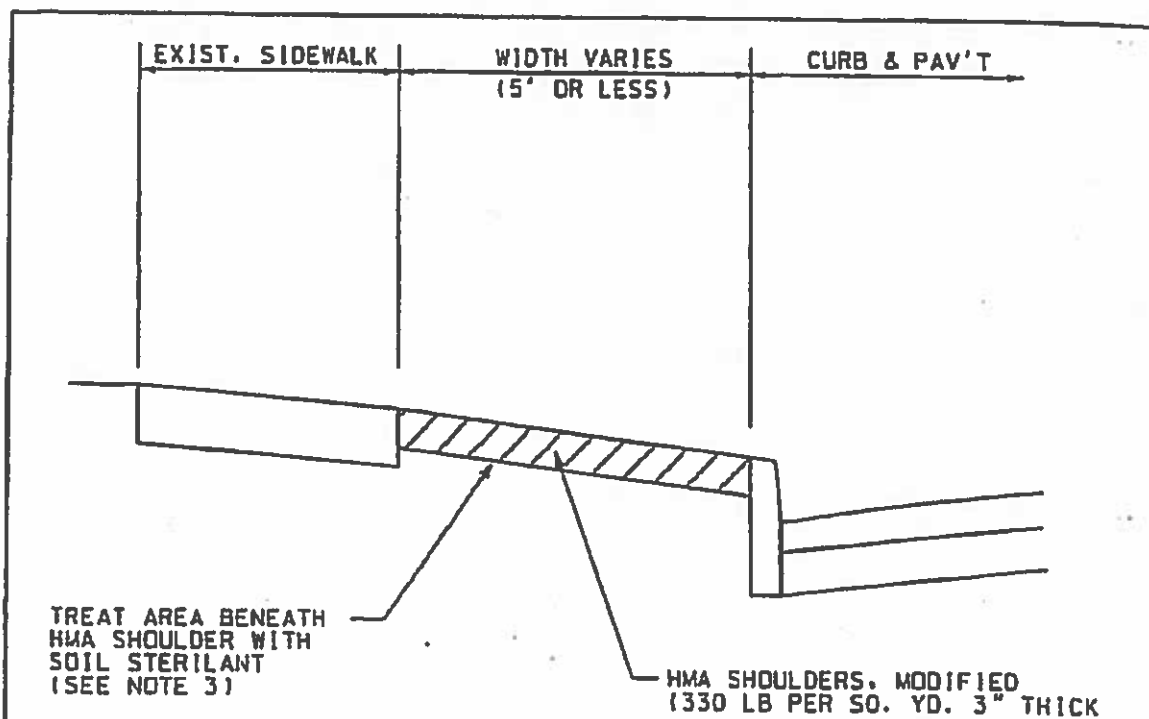
PROPOSED CURB, CONC.
DETAIL CD.
MODIFIED



NOTES:

- * THE ITEM OF SAW CUT WILL BE INCLUDED IN THE PAY ITEM OF
 - 1. HMA SURFACE, REM, MODIFIED
 - 2. HAND PATCHING
- THIS DETAIL SHALL BE USED AT LOCATIONS WHERE PROPOSED CURB IS CONSTRUCTED ADJACENT TO EXISTING HMA PAVEMENT NOT TO BE RESURFACED.

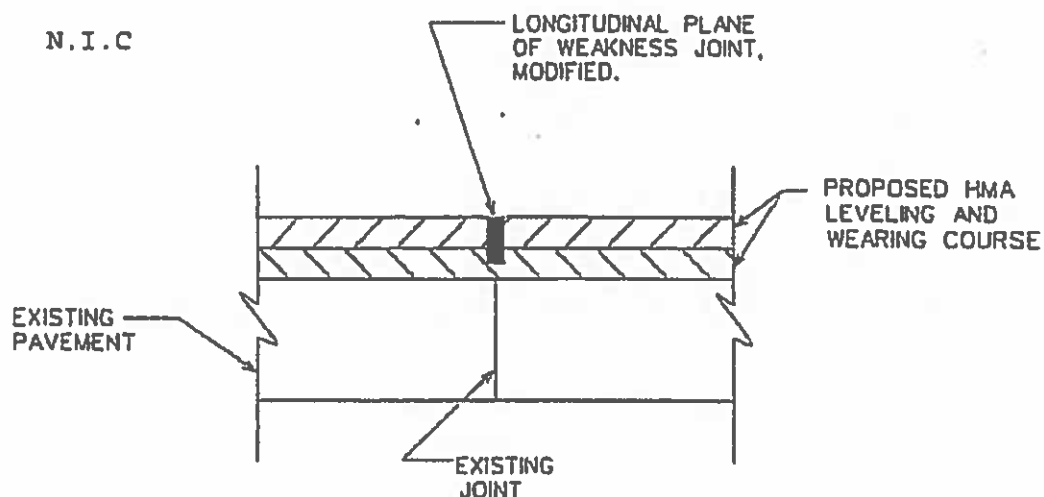
B A					HMA PATCHING AT PROPOSED CURB, CONC, DETAIL CD, MODIFIED	CITY OF DETROIT City Engineering Division
DEPARTMENT: _____ DIV: _____ CDD: _____ ASST: _____						Job No. _____
DRAWN BY: K.S.M. APPROVED: _____						Drwg. No. _____
DESIGNED BY: J.P. APPROVED: _____						Date: JULY 09
CHECKED BY: _____ APPROVED: _____ CT: _____						



NOTE:

1. THE MIXTURE FOR HMA SHOULDERS SHALL BE OF THE SAME MIXTURE AS SPECIFIED FOR THE LEVELING OR THE TOP COARSE.
2. THE MATERIAL FOR HMA SHOULDERS SHALL BE IN ACCORDANCE WITH SECTION 501 OF THE 2003 MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. 2012
3. THE MATERIAL FOR SOIL STERILANT SHALL BE IN ACCORDANCE WITH SUB SECTION 201.02 OF THE 2003 MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. 2012

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B																																									
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REVISIONS		Rev	Chg	Appd	Rev																																				
DESIGNED BY	K.S.M.	APPROVED																																							
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				Job No.																																					
				Drwg. No.																																					
				Date JULY 09																																					

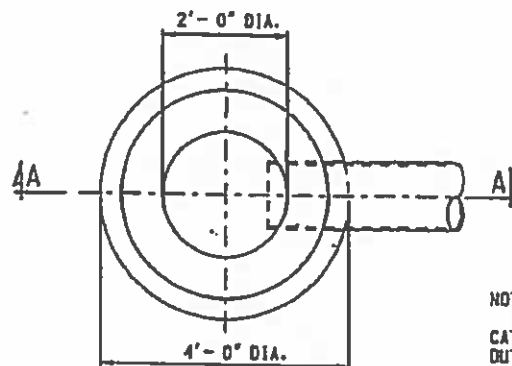


NOTES:

SAW PROPOSED HMA SURFACE MIN. 2" IN DEPTH AND MIN. $\frac{1}{8}$ " IN WIDTH AS DIRECTED BY THE ENGINEER. THE JOINT SHALL BE SEALED WITH COLD OR HOT APPLIED JOINT SEALANT. THE JOINT SEALANT, EQUIPMENT AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH THE 2005 MDOT STANDARD SPECIFICATION FOR CONSTRUCTION, SUBSECTIONS 914.04, 602.03-A13 AND 602.03-54 RESPECTIVELY.

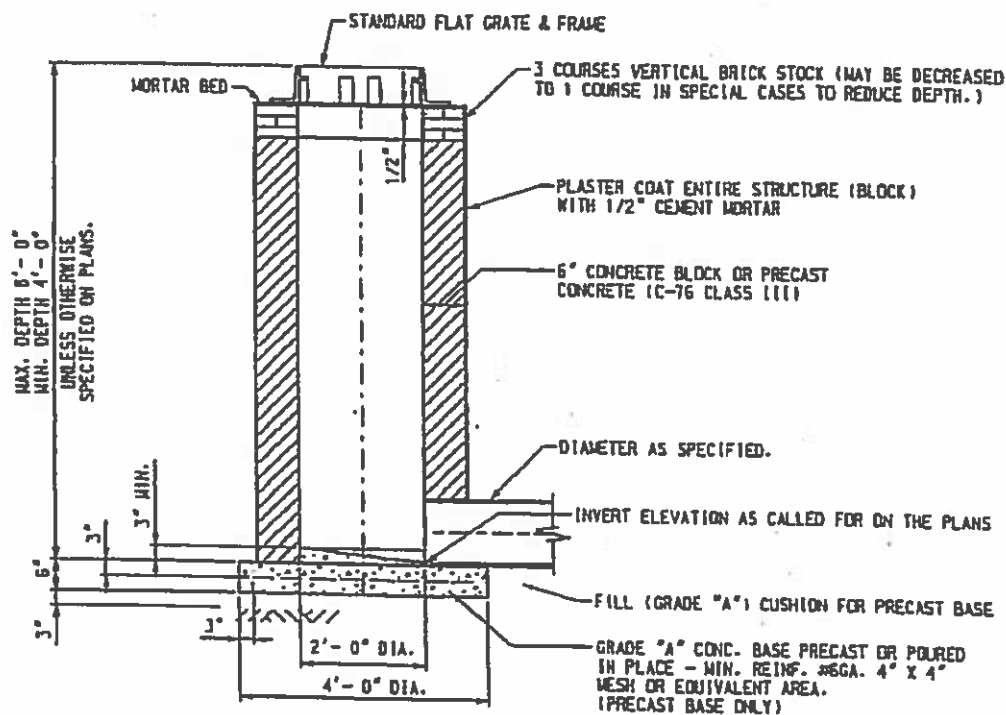
THE WORK OF SAWING AND SEALING LONGITUDINAL PLANE OF WEAKNESS JT, WILL BE DETERMINED BY LENGTH IN LINEAR FEET AND PAID FOR AT THE CONTRACT UNIT PRICE FOR "LONGITUDINAL PLANE OF WEAKNESS JT, MODIFIED"

B						LONGITUDINAL PLANE OF WEAKNESS JT, MODIFIED	CITY OF DETROIT City Engineering Division	
A								Job No.
REVISIONS								Drwg. No.
DRAWN BY K.S.M. APPROVED								Date JAN. 06
CHECKED BY N.H. APPROVED						CITY ENGINEER		



PLAN VIEW

NOTE:

CATCH BASIN "A" WILL BE USED ONLY WHEN
OUTLETTING TO A CATCH BASIN "B".

SECTION A-A

CATCH BASIN "A"

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002

PREPARED BY
BUREAU OF STREETS
AND HIGHWAYS

rev. K.S.M.

DRAWN BY:

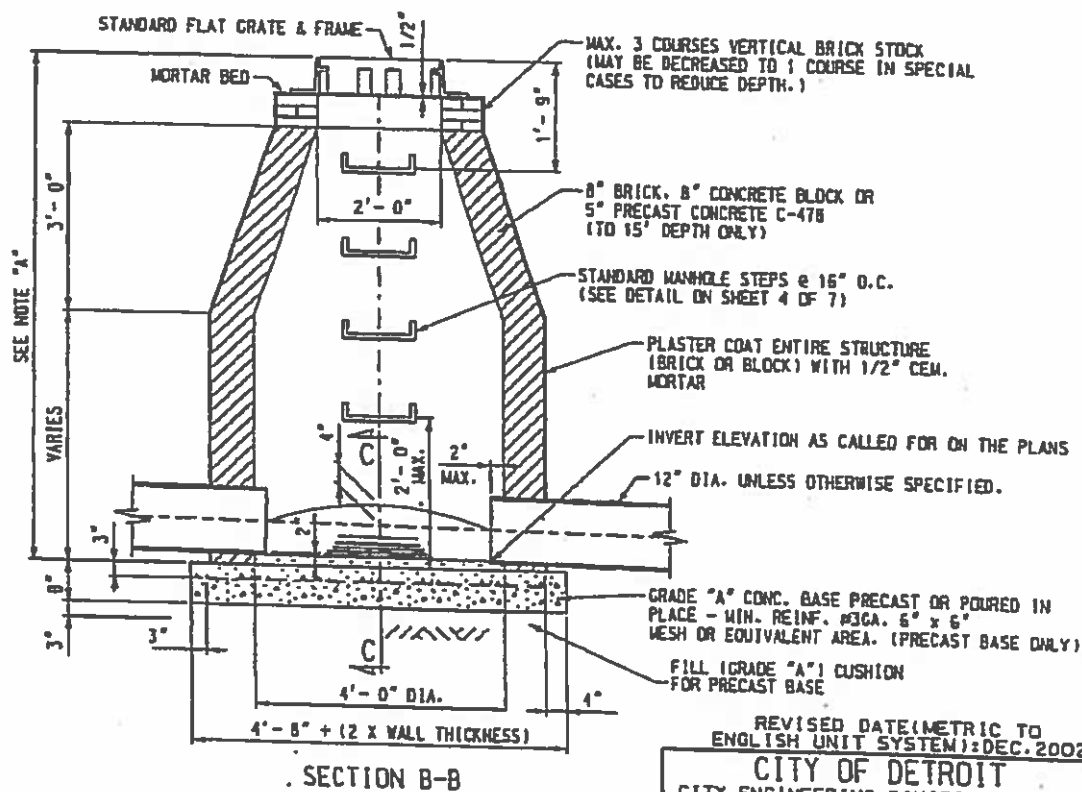
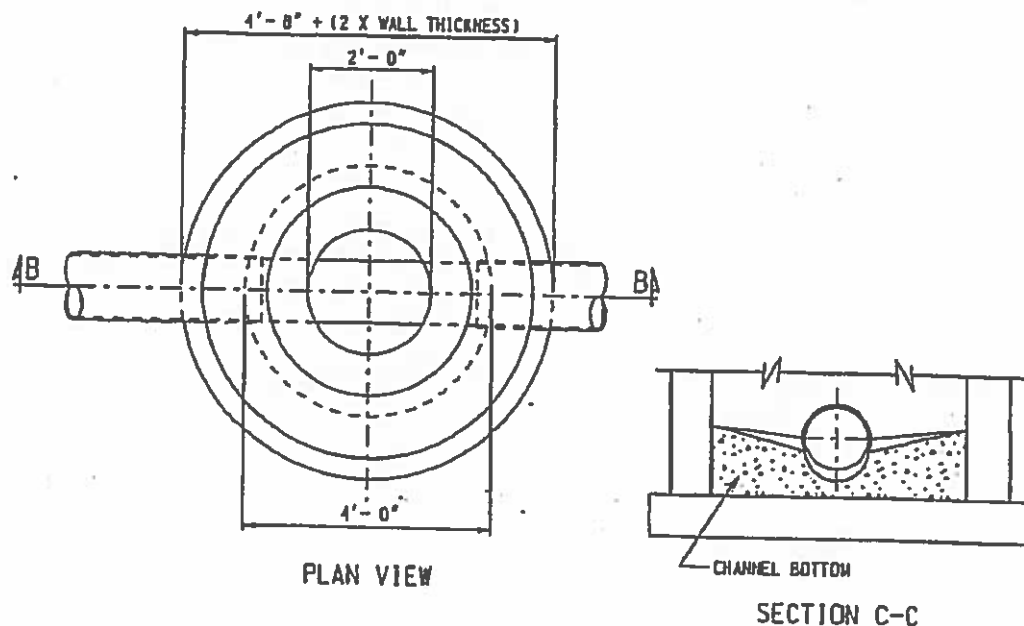
M.F.S.

CHECKED BY:

APPROVED

Dorothy Horder
ENGINEER OF STREETS
John J. Kelly
CITY ENGINEER

CITY OF DETROIT
CITY ENGINEERING DIVISION, D.P.W.
STANDARD PLAN FORCATCH BASINS "A" AND "B"
AND FLAT GRATE AND FRAMECIVOT/98
PLAN DATEDRAWING NO.
35DETAIL STANDARD NO.
C-5028SHEET
1 OF 5



CATCH BASIN "B"

NOTE "A":

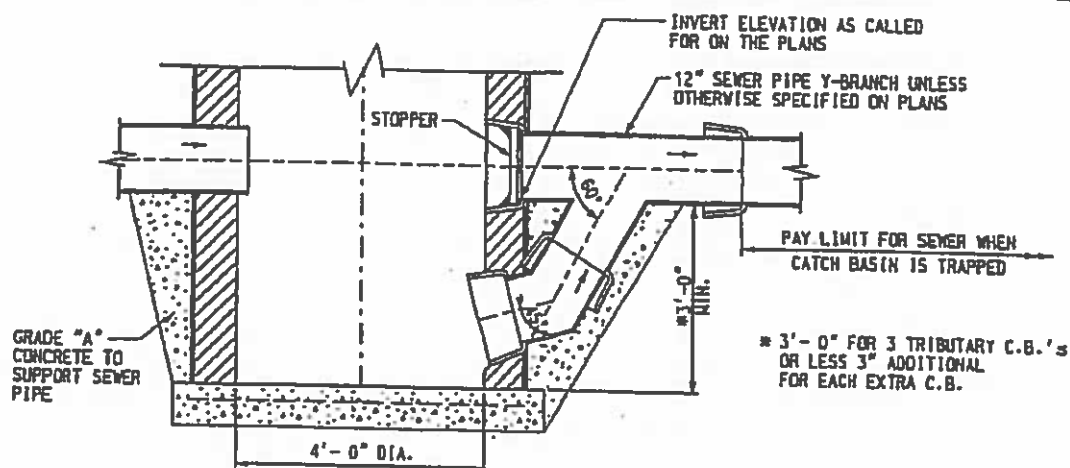
WALL THICKNESS SHALL BE 8" FROM THE TOP OF STRUCTURE TO A DEPTH OF 15'. BELOW 15' THE THICKNESS OF THE WALL SHALL BE 12"

REVISED DATE (METRIC TO ENGLISH UNIT SYSTEM): DEC. 2002

CITY OF DETROIT
CITY ENGINEERING DIVISION, D.P.W.
STANDARD PLAN FOR

CATCH BASINS "A" AND "B"
AND FLAT GRATE AND FRAME

01/07/98 PLAN DATE	DRAWING NO. 35	DETAIL STANDARD NO. C-5028	SHEET 2 OF 5
-----------------------	-------------------	-------------------------------	-----------------

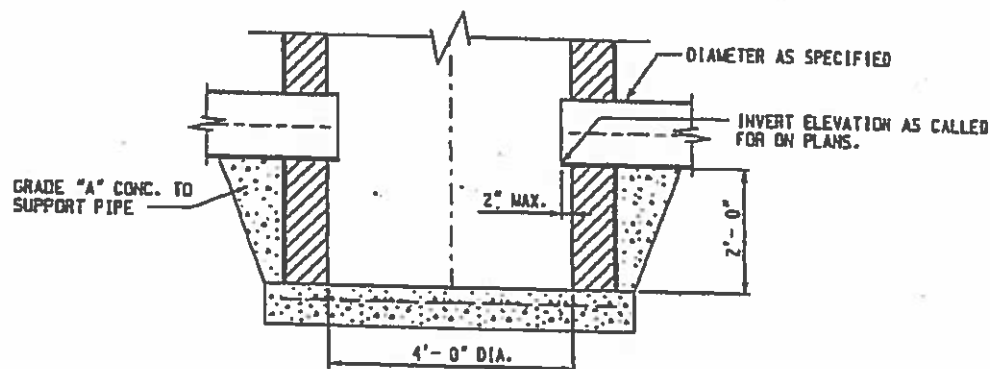


NOTES:

SEWER TRAP TO BE OF THE SAME MAT'L. & STRENGTH AS THE OUTLET SEWER PIPE.

TRAP SHALL BE SUPPORTED BY BLOCKING OR ANY OTHER MEANS UNTIL CATCH BASIN IS COMPLETED AND CONCRETE OR MORTAR AROUND BRICK IS SET. ANY VOIDS BETWEEN THE TRAP AND GROUND UNDERNEATH SHALL BE FILLED WITH GRADE "A" CONCRETE.

DETAIL OF TRAP FOR CATCH BASIN "B"



DETAIL OF SUMP FOR CATCH BASIN "B"

CITY OF DETROIT
CITY ENGINEERING DIVISION. D.P.W.
STANDARD PLAN FOR

CATCH BASINS "A" AND "B"
AND FLAT GRATE AND FRAME

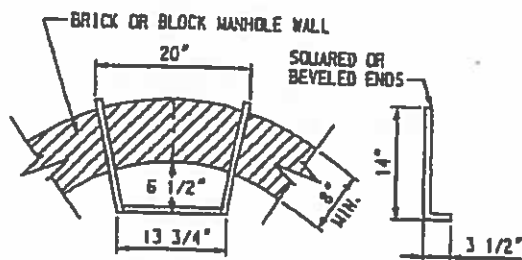
REVISED DATE(METRIC TO ENGLISH UNIT SYSTEM):DEC.2002

07/07/00
PLAN DATE

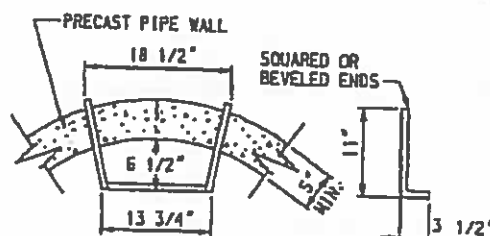
DRAWING NO.
35

DETAIL STANDARD NO.
C-5028

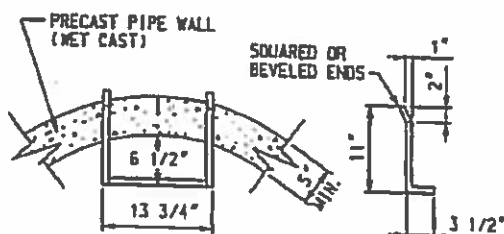
SHEET
3 OF 5



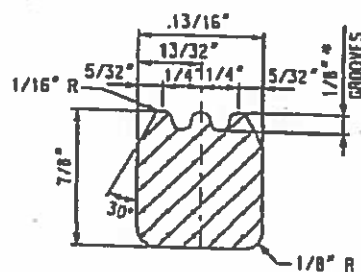
PLAN VIEW
(USE WITH BRICK OR BLOCK M.H.)



PLAN VIEW
(USE WITH PRECAST M.H. UNITS)



PLAN VIEW
(USE WITH WET CAST M.H. UNITS)



CROSS - SECTION

*NOTE:

IN LIEU OF GROOVES, ALTERNATE
FOOT HOLD CONFIGURATIONS WILL
BE CONSIDERED FOR APPROVAL.

ALUMINUM MANHOLE STEP STANDARD DETAILS

NO SCALE

NOTES:

1. MANHOLE STEPS SHALL CONFORM TO THE REQUIREMENTS FOR "ALUMINUM ALLOY EXTRUDED BARS, RODS, SHAPES AND TUBES", A.S.T.M. B221 (CURRENT), ALLOY 6061, TEMPER T-6 OR APPROVED EQUAL.
2. EITHER THE FLARED LEG OR PARALLEL LEG STEP MAY BE USED FOR POURED IN PLACE CONCRETE CONSTRUCTION OR IN WET CAST MANHOLE UNITS.
3. THE PARALLEL LEG STEP SHALL BE USED IN EXISTING STRUCTURES BY PLACING IN DRILLED HOLES AND GROUTING WITH NON-SHRINK GROUT.

REVISED DATE (METRIC TO
ENGLISH UNIT SYSTEM): DEC. 2002

CITY OF DETROIT
CITY ENGINEERING DIVISION, D.P.W.
STANDARD PLAN FOR

CATCH BASINS "A" AND "B"
AND FLAT GRATE AND FRAME

03/07/98 PLAN DATE	DRAWING NO. 35	DETAIL STANDARD NO. C-5028	SHEET 1 OF 5
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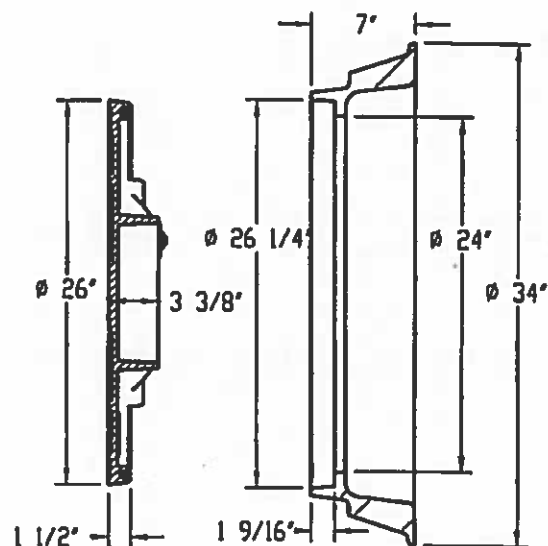
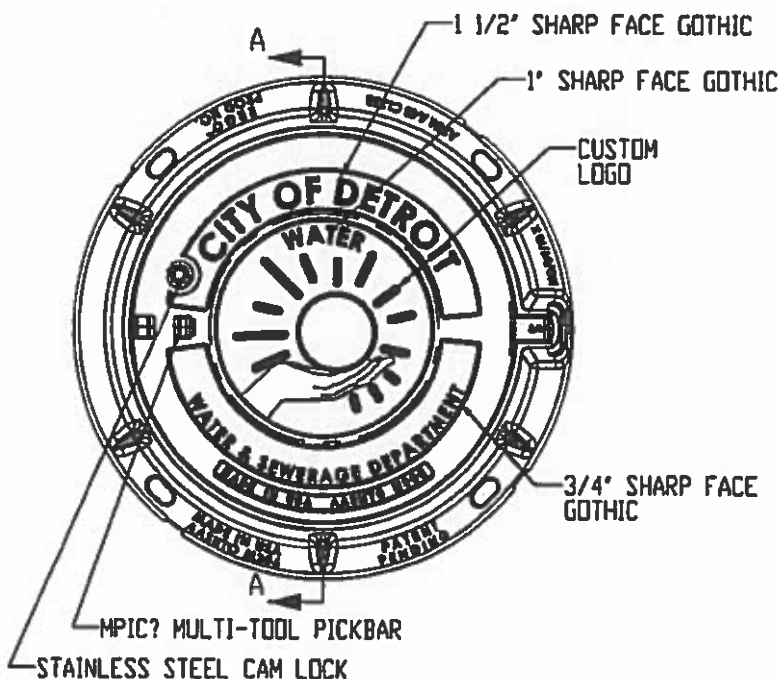
GENERAL NOTES

1. CENTER OF CATCH BASIN SHALL BE 20 INCHES FROM BACK OF CURB.
2. ALL SIZES AND FLOW LINES OF PIPES, AND ELEVATIONS FOR TOP AND BOTTOM OF STRUCTURES SHALL BE DETERMINED FROM THE PLANS OR CONSTRUCTION REQUIREMENTS.
THE BELL SHALL BE REMOVED FROM THE FIRST LENGTH OF OUTLET PIPE PROJECTING THROUGH THE WALL OF THE STRUCTURES WHEN ANY STRUCTURE IS CONSTRUCTED OF PRECAST CONCRETE OR CONCRETE BLOCK. THE TOP OF THE MASONRY SHALL BE LEFT SUFFICIENTLY LOW TO PERMIT PROPER ADJUSTMENT OF THE COVER TO GRADE BY THE USE OF MORTAR OR BRICKS AS DIRECTED BY THE ENGINEER.
3. A TRAP, AS DETAILED ON SHEET 3 OF 7, SHALL BE PLACED WHERE CALLED FOR IN THE OUTLET SEWER LINE OF CATCH BASINS "B". THIS TRAP SHALL BE SET INTO THE MASONRY WALL AS SHOWN ON THE DETAIL.
THE SPACE BETWEEN THE FACES OF THE WALL AND THE TRAP SHALL BE COMPLETELY FILLED WITH CEMENT, MORTAR OR CONCRETE, SO AS TO HOLD TRAP SECURELY IN PLACE.
4. THE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION EXCEPT AS NOTED ON THIS SHEET AND ON THE PLANS.
5. A PLASTER COAT OF MORTAR 1/2" IN THICKNESS SHALL BE APPLIED TO THE OUTER SURFACE OF THE STRUCTURE AS SHOWN. A 1/2" CEMENT PLASTER COAT SHALL BE PLACED ON THE INSIDE OF ALL SUMPS.
6. CONTRACTOR SHALL VERIFY ELEVATIONS OF EXISTING UTILITIES TO ENABLE CONSTRUCTION TO INDICATED ELEVATIONS SHOWN ON DRAWINGS. IF NECESSARY, INVERT ELEVATIONS SHOWN ON THE DRAWINGS MAY BE ALTERED IN THE FIELD TO CLEAR EXISTING UTILITIES. SUCH ALTERATIONS, UPWARD OR DOWNWARD, SHALL BE AT NO CHANGE IN CONTRACT PRICE.
7. WHEN PRECAST CONCRETE PIPE SECTIONS ARE USED FOR CATCH BASINS, EITHER A SECTION OF THE INLET AND OUTLET PIPES OR AN OPENING OR EYE FOR THE INLET AND OUTLET PIPES SHALL BE CAST INTO THE WALL OF THE CATCH BASIN PIPE WHEN IT IS BEING MANUFACTURED. EYES IN PRECAST PIPE SECTIONS SHALL BE FURNISHED TO ACCOMMODATE A FLEXIBLE JOINT CONNECTION SUCH AS PRESS-WEDGE BY PRESS SEAL GASKET CORP. OR RES-SEAL BY SCALES MFG. CORP.
8. PAY LIMIT FOR SEWERS SHALL BE INSIDE FACES OF STRUCTURES UNLESS OTHERWISE NOTED.
9. ALL DIMENSIONS ARE IN (INCHES) UNLESS OTHERWISE NOTED.

CITY OF DETROIT			
CITY ENGINEERING DIVISION, D.P.W.			
STANDARD PLAN FOR			
CATCH BASINS "A" AND "B"			
AND FLAT GRATE AND FRAME			
03/07/98 PLAN DATE	DRAWING NO. 35	DETAIL STANDARD NO. C-5028	SHEET 5 of 5

REVISED DATE: METRIC TO ENGLISH UNIT SYSTEM: DEC. 2002

ERGO Assembly



SECTION A-A

DESIGN FEATURES

MATERIALS

- COVER: DUCTILE IRON (80-55-06)
- FRAME: GRAY IRON (CL35)

DESIGN LOAD: HEAVY DUTY

OPEN AREA: N/A

COATING: UNDIPPED

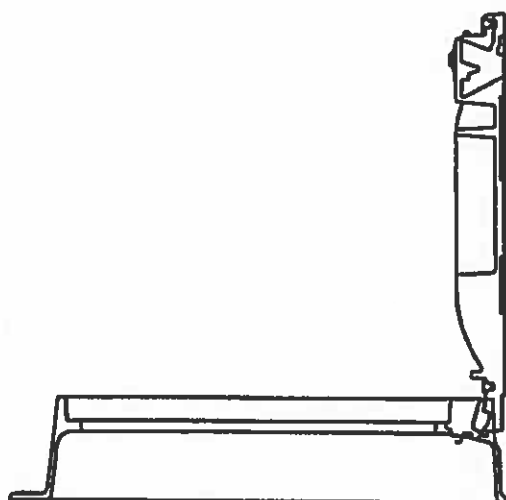
DESIGNATES MACHINED SURFACE

CERTIFICATION

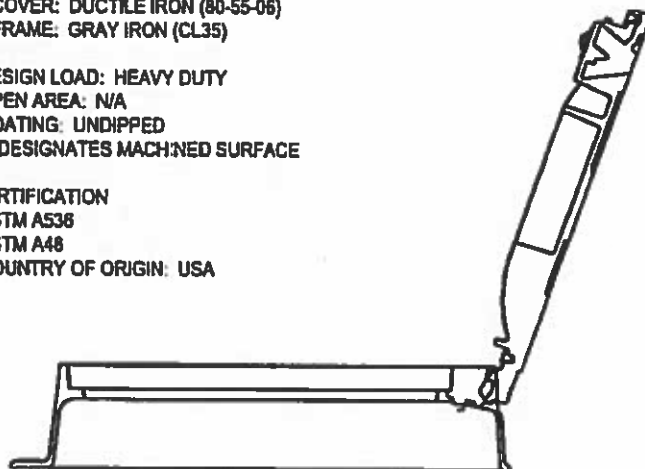
ASTM A538

ASTM A48

COUNTRY OF ORIGIN: USA



SAFETY LOCK @ 90°



FULLY OPENED & REMOVAL POSITION @ 120°

DWSD APPROVAL:

DATE:

04/16/14



CITY OF DETROIT
CITY ENGINEERING DIVISION
DPW

DWSD MANHOLE
ERGO ASSEMBLY

APPROVED:

ENGINEER OF STREETS

CITY ENGINEER

SHEET 1 OF 1

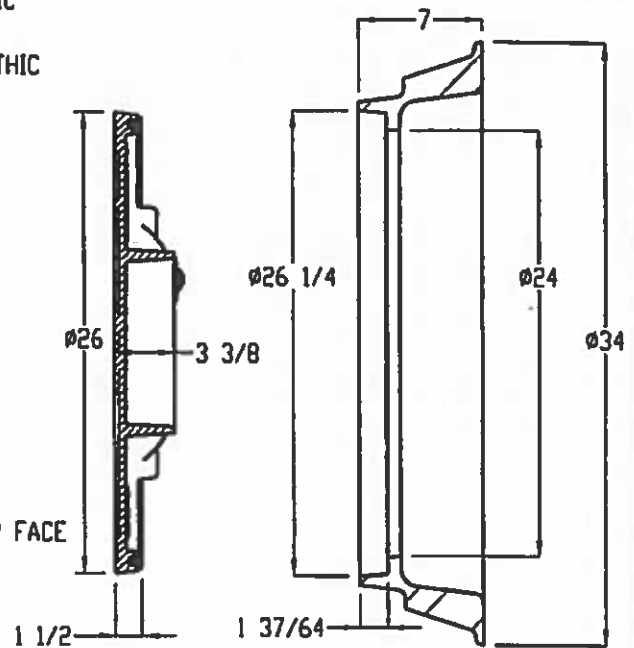
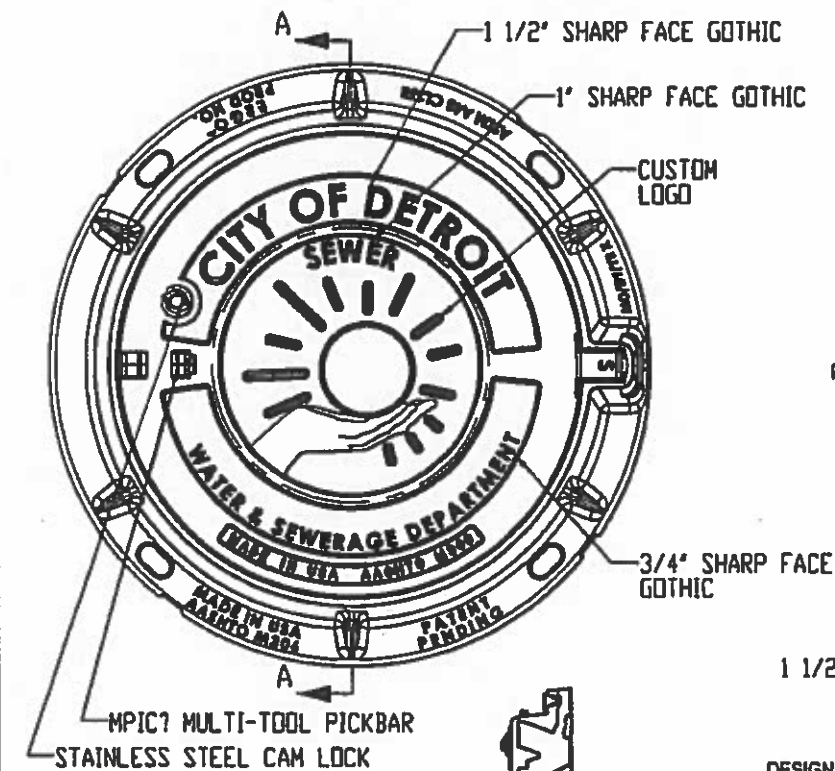
DETAIL STD. No.

DRAWING No. 101

DRAWN BY: N.Y. SANTOS

DATE: 07/18/2014

ERGO Assembly



SECTION A-A

DESIGN FEATURES

MATERIALS

COVER: DUCTILE IRON (80-55-06)
FRAME: GRAY IRON (CL35)

DESIGN LOAD: HEAVY DUTY

-OPEN AREA: N/A
-COATING: UNDIPPED
- DESIGNATES MACHINED SURFACE

CERTIFICATION

-ASTM A536
-ASTM A48
-COUNTRY OF ORIGIN: USA

SAFETY LOCK @ 90°

FULLY OPENED & REMOVAL POSITION @ 120°

DWSD APPROVAL: *[Signature]*

DATE: *04/16/14*

Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.



CITY OF DETROIT
CITY ENGINEERING DIVISION
DPW

DWSD MANHOLE
ERGO ASSEMBLY

APPROVED:

[Signature] 4/15/14
ENGINEER OF STREETS
[Signature] 4/16/14
CITY ENGINEER

SHEET 1 OF 1

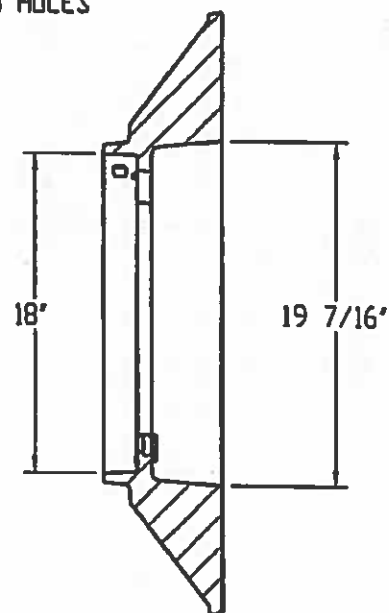
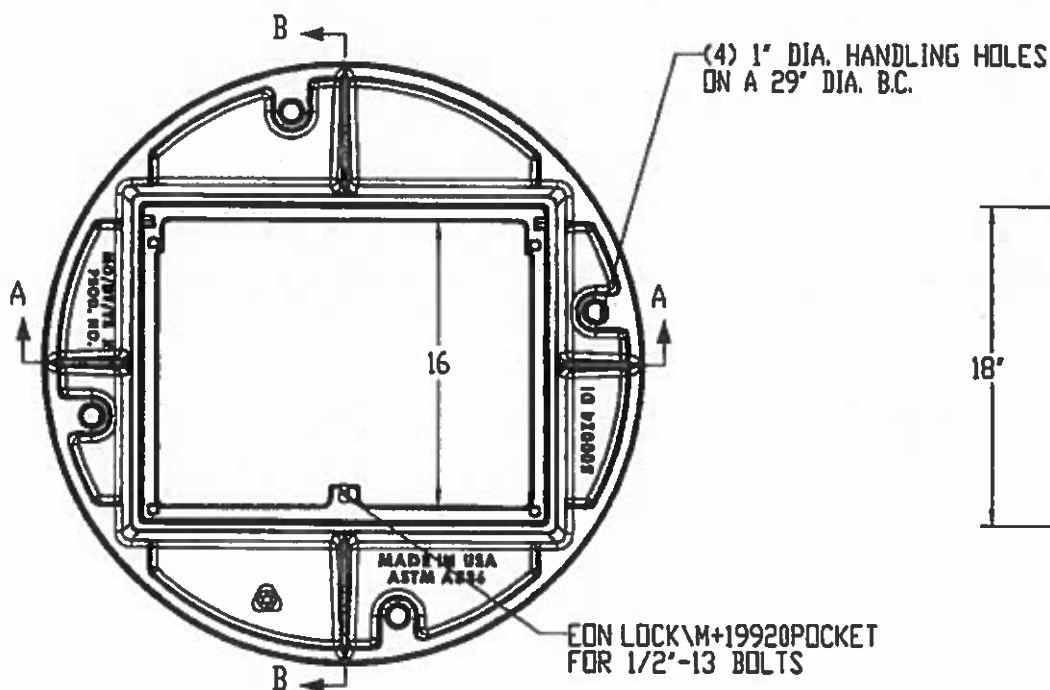
DETAIL STD No.

DRAWING No. 102

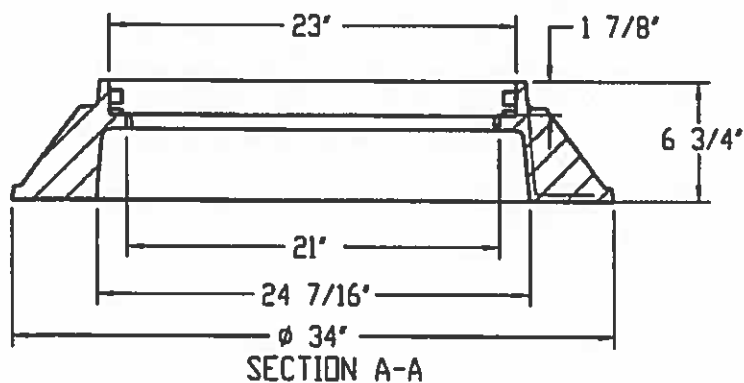
DRAWN BY: N.Y. SANTOS

DATE: 01/15/2014

5000 Frame



SECTION B-B



DESIGN FEATURES

-MATERIALS

FRAME: DUCTILE IRON (70-50-05)

-DESIGN LOAD: HEAVY DUTY

-COATING: UNDIPPED

- / DESIGNATES MACHINED SURFACE

CERTIFICATION

-ASTM A538

-COUNTRY OF ORIGIN: USA

DWSD APPROVAL:

D. Singer

DATE:

04/16/14

CITY OF DETROIT
CITY ENGINEERING DIVISION
DPW

DWSD MANHOLE
5000 FRAME

APPROVED:

rephat 4/16/14
ENGINEER OF STREETS
David J. Santos 4/16/14
CITY ENGINEER

SHEET 1 OF 1

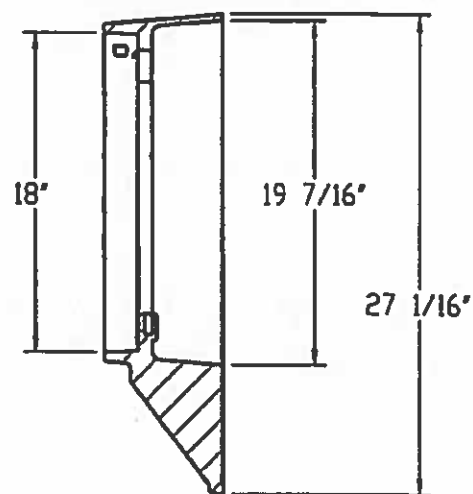
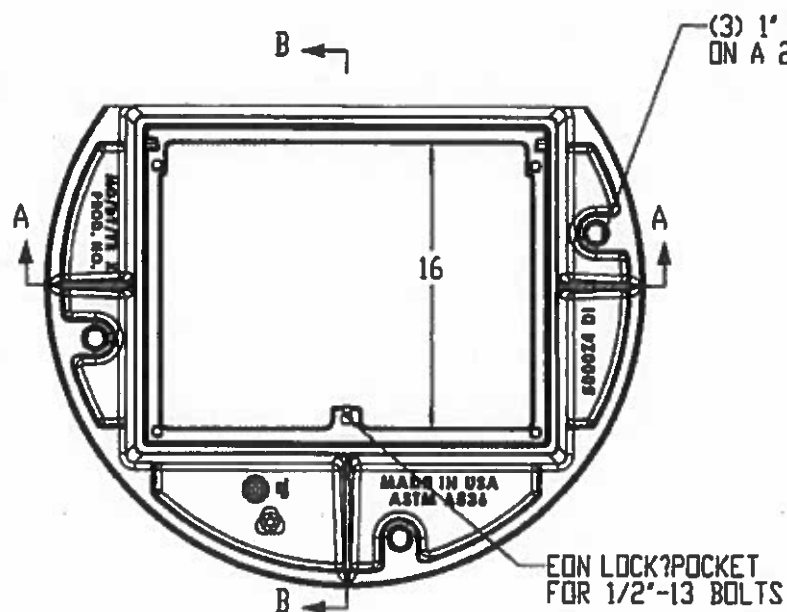
DETAIL STD. No.

DRAWING No. 103

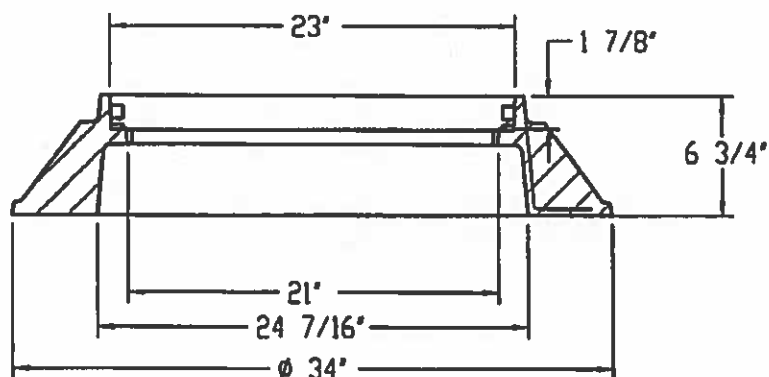
DRAWN BY: N.Y. SANTOS

DATE: 07/5/2014

5000 Frame



SECTION B-B



SECTION A-A

DESIGN FEATURES

-MATERIALS

FRAME: DUCTILE IRON (70-50-05)

-DESIGN LOAD: HEAVY DUTY

-COATING: UNDIPTED

- / DESIGNATES MACHINED SURFACE

CERTIFICATION

-ASTM A536

-COUNTRY OF ORIGIN: USA

DWSD APPROVAL: *R. Singlet*

DATE: 04/16/14

CITY OF DETROIT
CITY ENGINEERING DIVISION
DPWDWSD MANHOLE
5000 FRAME

APPROVED:

4/16/14
 ENGINEER OF STREETS
4/16/14
 CITY ENGINEER

SHEET 1 OF 1

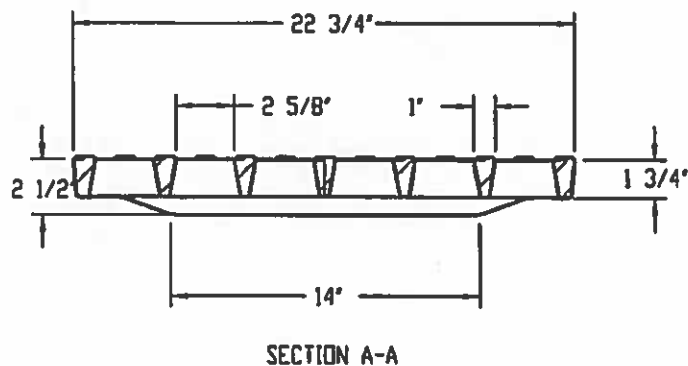
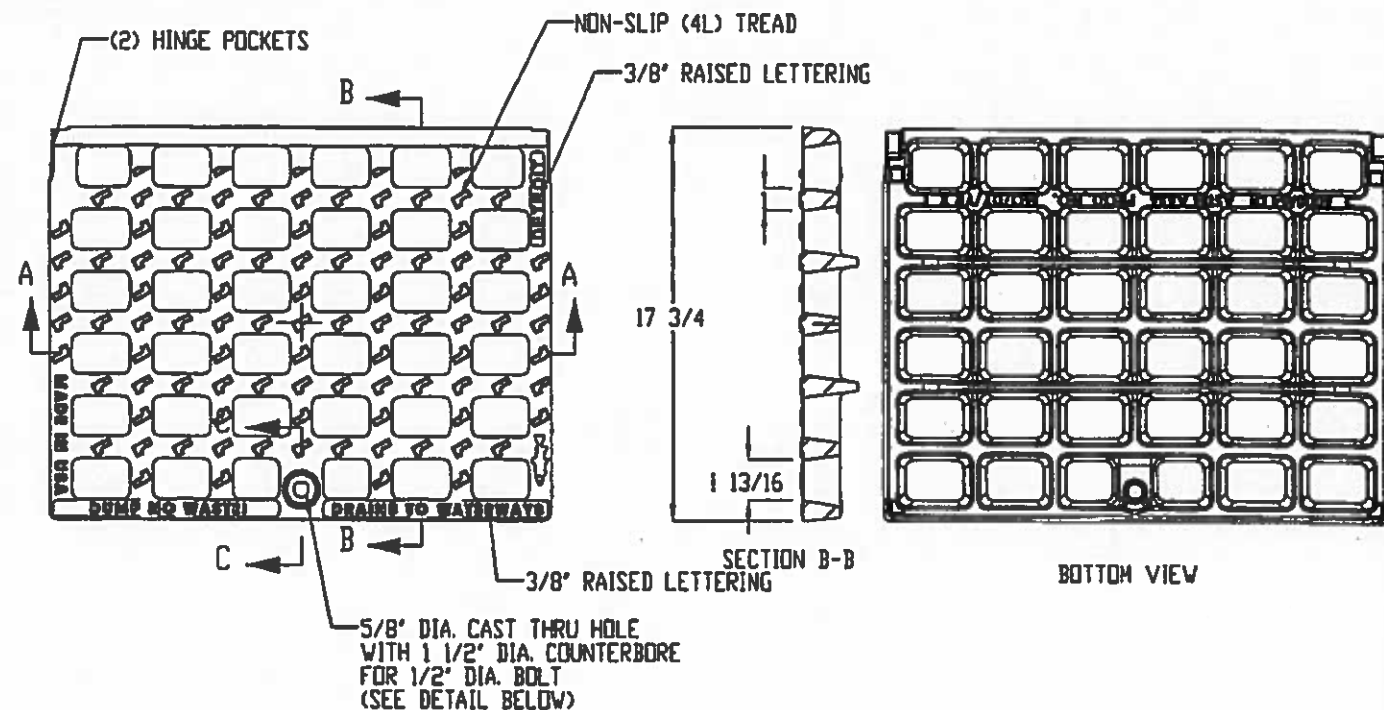
DETAIL STD. No.

DRAWING No. 104

DRAWN BY: N.Y. SANTOS

DATE: 01/15/2014

5000M4 Grate



DESIGN FEATURES

-MATERIALS

COVER: DUCTILE IRON (80-55-06)

-DESIGN LOAD: HEAVY DUTY

-OPEN AREA: 160 SQ IN

-COATING: UNDIPT

- DESIGNATES MACHINED SURFACE

CERTIFICATION

-ASTM A536

-COUNTRY OF ORIGIN: USA

DWSD APPROVAL:

D. Single

DATE:

04/16/14

CITY OF DETROIT
CITY ENGINEERING DIVISION
DPWCATCH BASIN
5000 M4 GRATE

APPROVED:

re-prod 4/16/14
 ENGINEER OF STREETS
[Signature]
 CITY ENGINEER

SHEET 1 OF 1

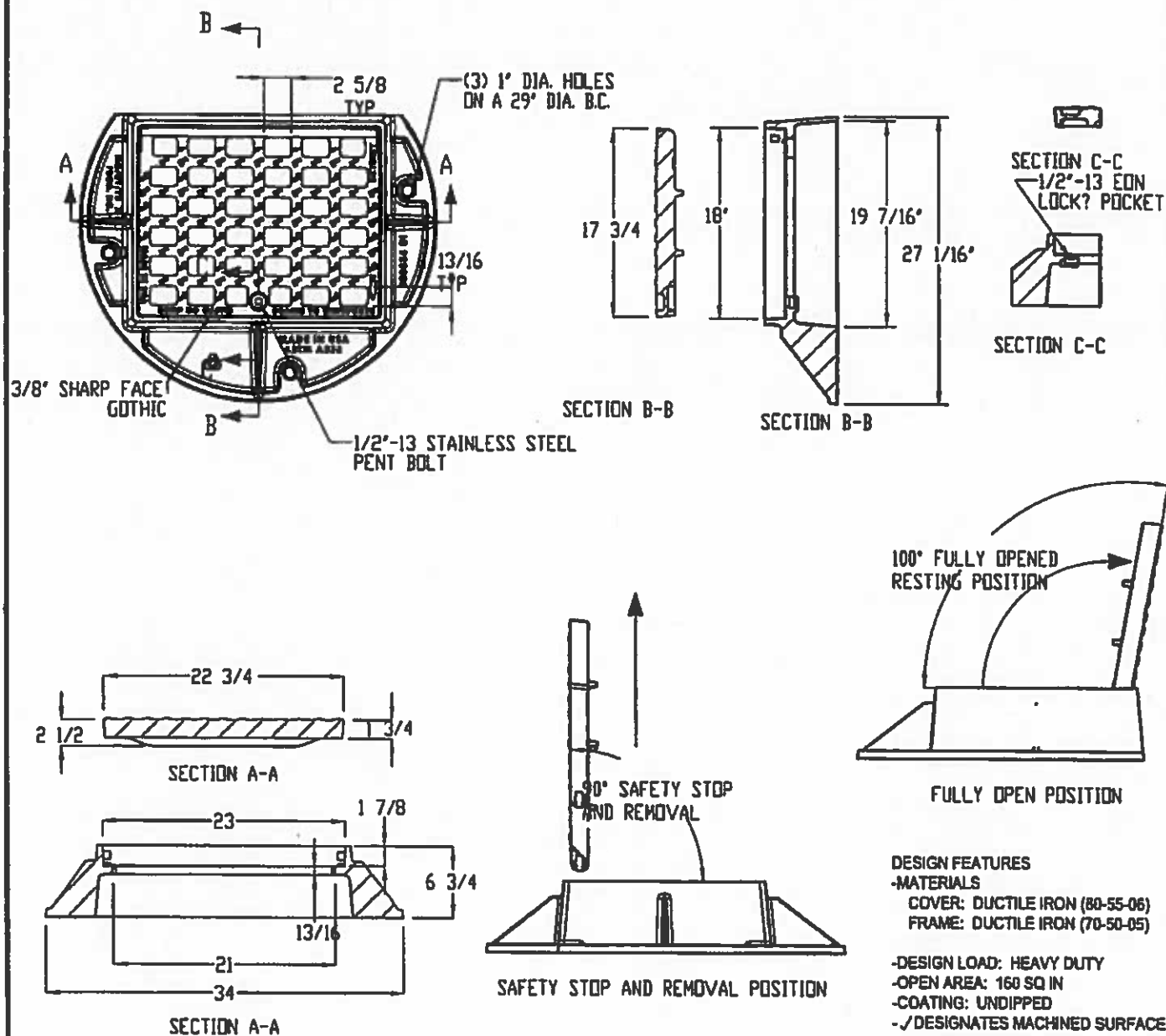
DETAIL STD. No

DRAWING No. 103

DRAWN BY: N.Y. SANTOS

DATE: 0/15/2014

5000Z4 5000M4 Assembly



DESIGN FEATURES

-MATERIALS

COVER: DUCTILE IRON (80-55-06)

FRAME: DUCTILE IRON (70-50-05)

-DESIGN LOAD: HEAVY DUTY

-OPEN AREA: 160 SQ IN

-COATING: UNDIPTED

- / DESIGNATES MACHINED SURFACE

CERTIFICATION

-ASTM A536

-COUNTRY OF ORIGIN: USA

Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

DWSD APPROVAL: *P. Singh*DATE: *04/16/14*

APPROVED:

4/16/14
 ENGINEER OF STREETS
4/16/14
 CITY ENGINEER

SHEET 1 OF 1

DETAIL STD. No.

DRAWING No. 108

DRAWN BY: N.Y. SANTOS

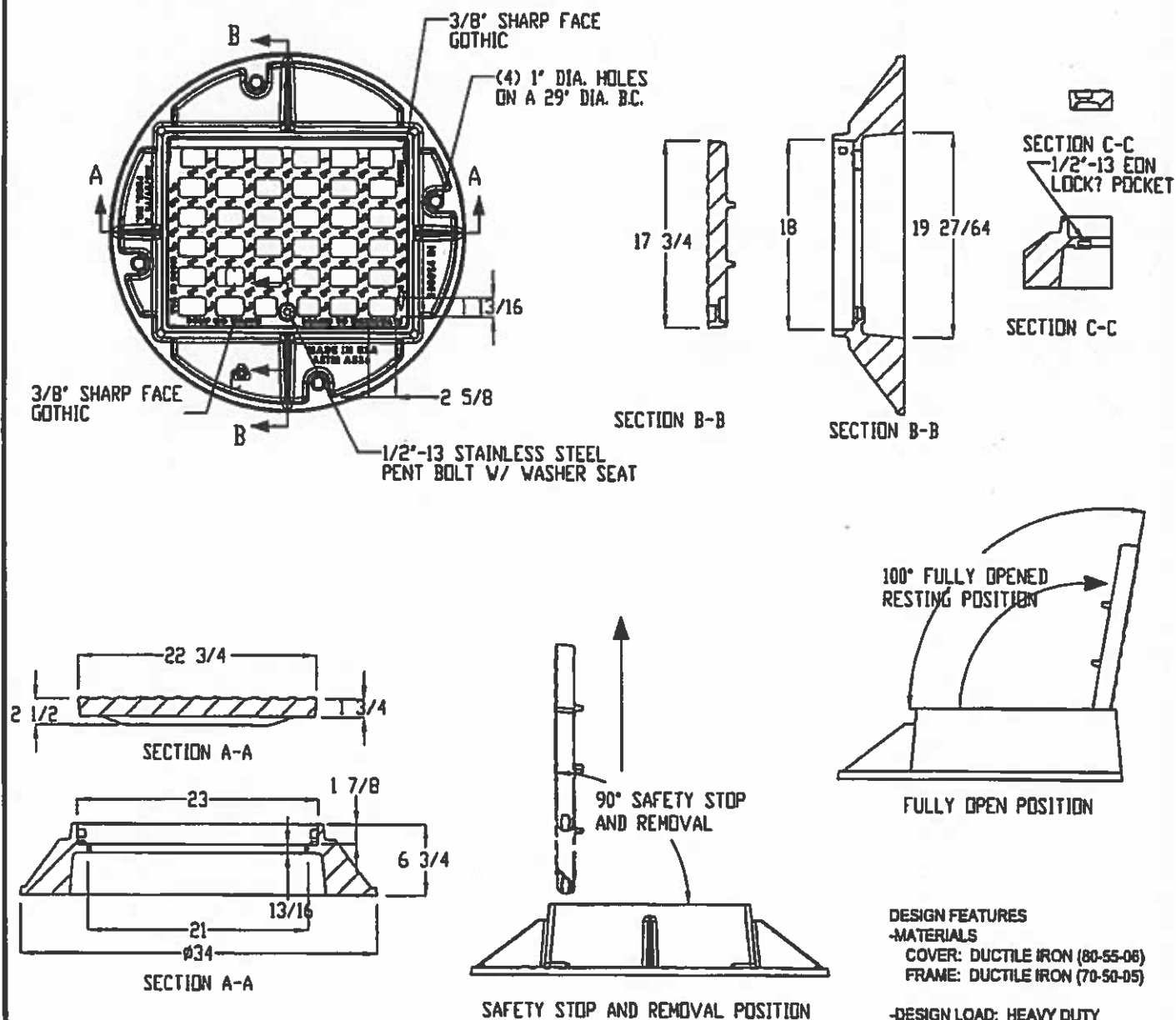
DATE: 01/5/2014



CITY OF DETROIT
 CITY ENGINEERING DIVISION
 DPW

CATCH BASIN
 5000Z4 5000M4 ASSEMBLY

5000 Assembly



DWSD APPROVAL:

DATE:



CITY OF DETROIT
CITY ENGINEERING DIVISION
DPW

CATCH BASIN
5000 ASSEMBLY

APPROVED:

4/16/14
CITY ENGINEER

SHEET 1 OF 1

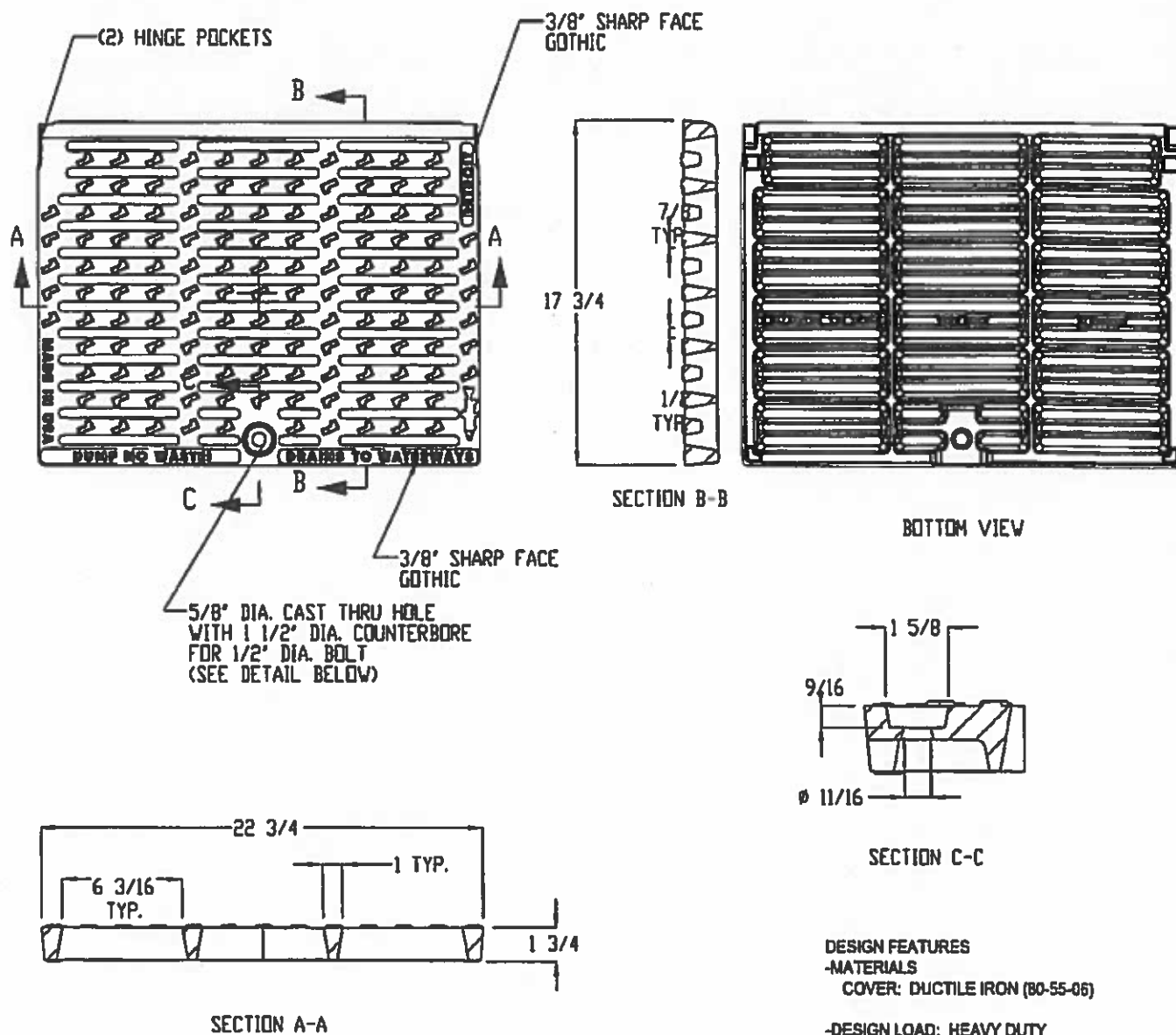
DETAIL STD. No.

DRAWING No. 107

DRAWN BY: N.Y. SANTOS

DATE: 01/15/2014

5000M5 Grate



DWSD APPROVAL:

DATE:

04/16/14



CITY OF DETROIT
CITY ENGINEERING DIVISION
DPW

A.D.A. CATCH BASIN
5000M5 GRATE

APPROVED:

updated 4/16/14
ENGINEER OF STREETS

CITY ENGINEER

SHEET 1 OF 1

DETAIL STD. No.

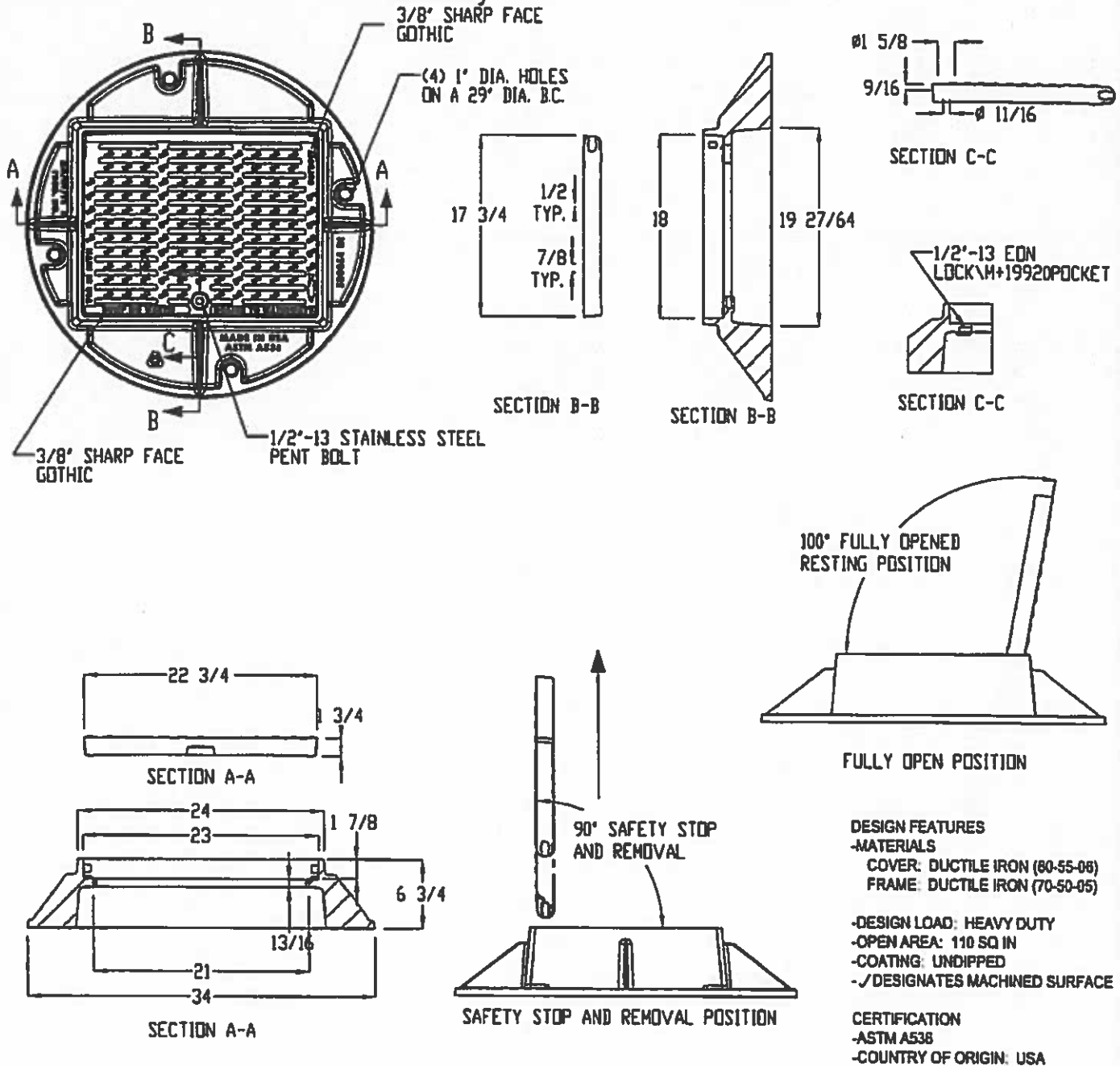
DRAWING No. 106

DRAWN BY: N.Y. SANTOS

DATE: 0/15/2014

5000Z4 5000M5

Assembly



DWSD APPROVAL:

R. Singlet

DATE:

04/16/14

Weights (lbs/kg), dimensions (inches/mm)
and drawings provided for your guidance. We
reserve the right to modify specifications without
prior notice.



CITY OF DETROIT
CITY ENGINEERING DIVISION
DPW

A.D.A. CATCH BASIN
5000Z4 5000M5 ASSEMBLY

APPROVED:

approved 4/16/14
ENGINEER OF STREETS
4/16/14
CITY ENGINEER

SHEET 1 OF 1

DETAIL STD. No.

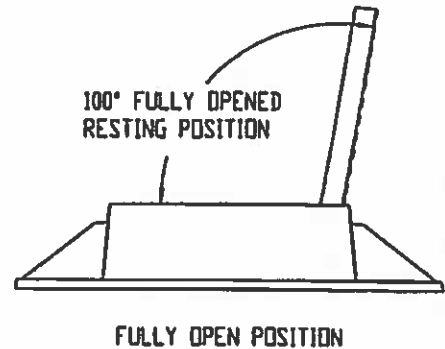
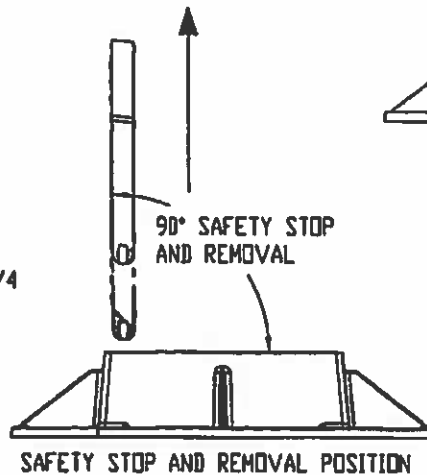
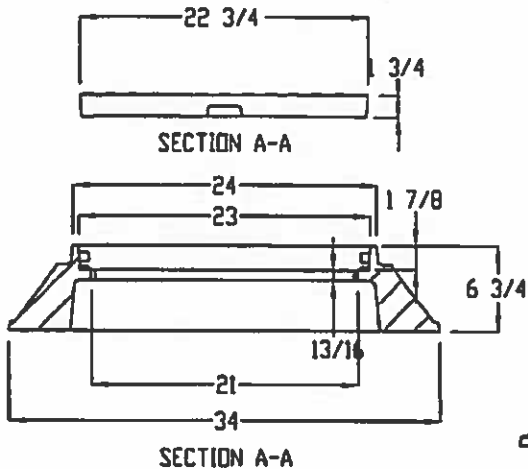
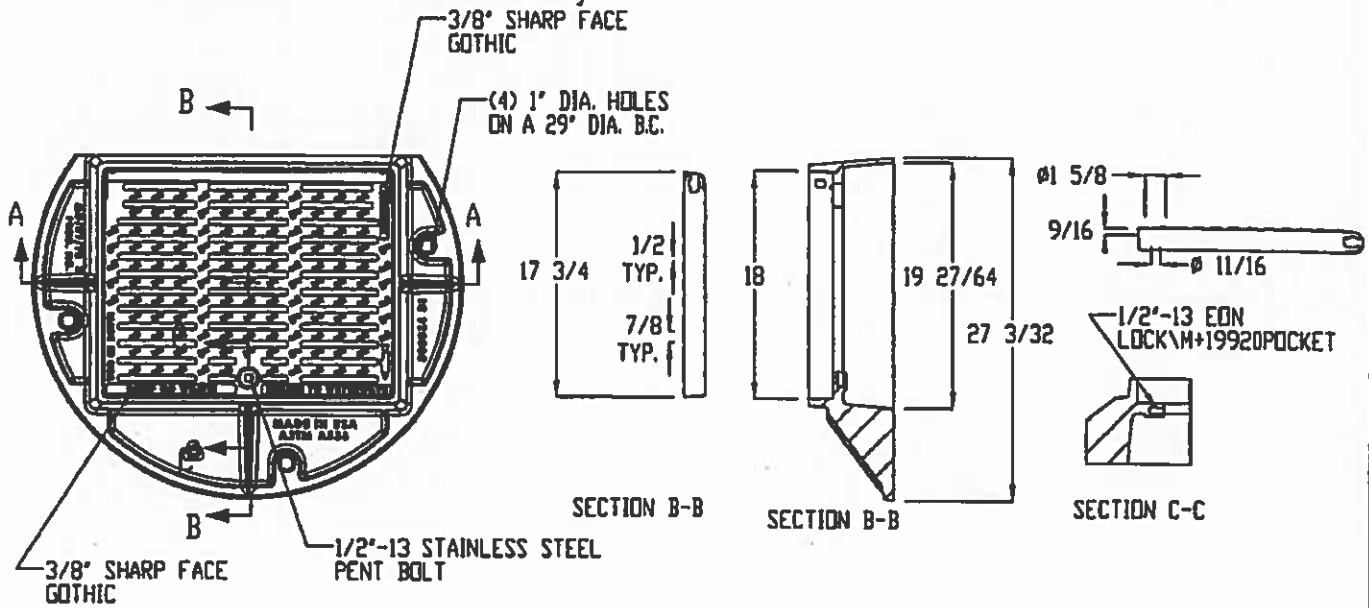
DRAWING No. 108

DRAWN BY: N.Y. SANTOS

DATE: 07/5/2014

5000Z4 5000M5

Assembly



DESIGN FEATURES

-MATERIALS

COVER: DUCTILE IRON (80-55-06)

FRAME: DUCTILE IRON (70-50-05)

-DESIGN LOAD: HEAVY DUTY

-OPEN AREA: 110 SQ IN

-COATING: UNDIPPED

- / DESIGNATES MACHINED SURFACE

CERTIFICATION

-ASTM A536

-COUNTRY OF ORIGIN: USA

DWSD APPROVAL:

R. Single

DATE:

04/16/14

CITY OF DETROIT
CITY ENGINEERING DIVISION
DPWA.D.A. CATCH BASIN
5000Z4 5000M5 ASSEMBLY

APPROVED:

updated 4/16/14

[Signature]

CITY ENGINEER

SHEET 1 OF 1

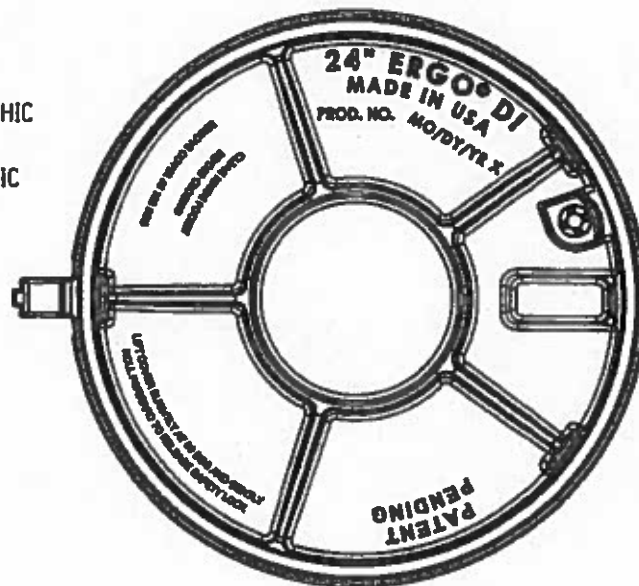
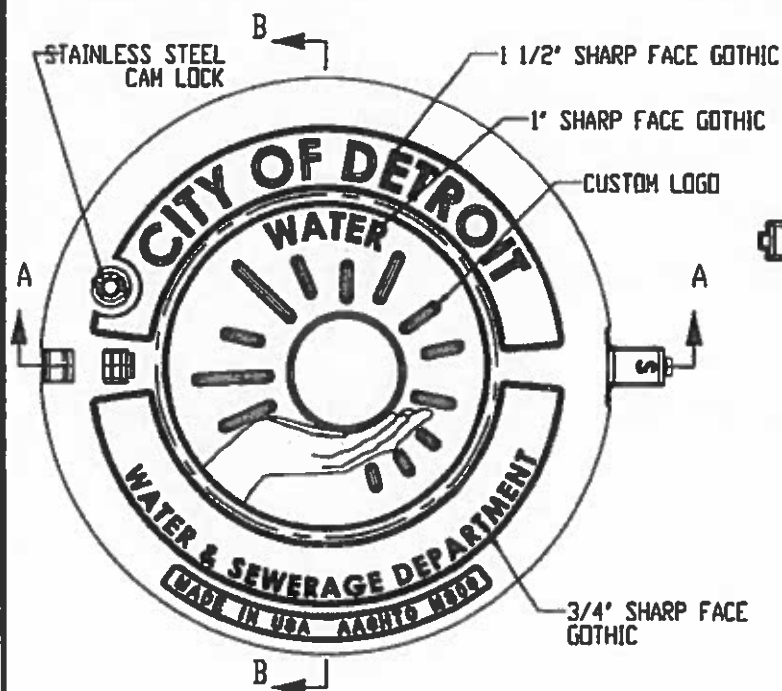
DETAIL STD. No.

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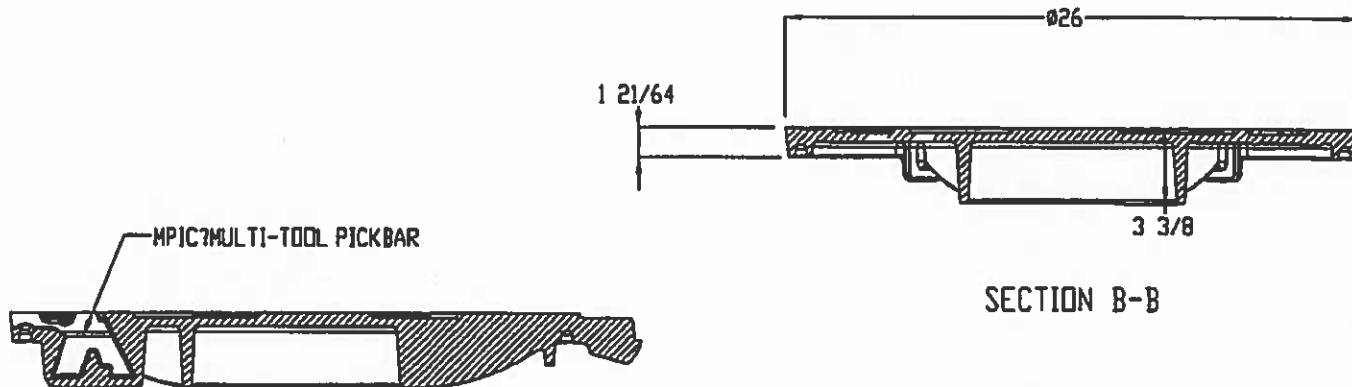
DRAWN BY: N.Y. SANTOS

DATE: 01/5/2014

ERGO Cover



BOTTOM VIEW



SECTION A-A

SECTION B-B

DESIGN FEATURES

-MATERIALS

COVER: DUCTILE IRON (B0-55-06)

-DESIGN LOAD: HEAVY DUTY

-OPEN AREA: N/A

-COATING: UNDIPPED

-✓ DESIGNATES MACHINED SURFACE

CERTIFICATION

-ASTM A536

-COUNTRY OF ORIGIN: USA

DWSD APPROVAL:

D. Singley

DATE:

04/16/14



CITY OF DETROIT
CITY ENGINEERING DIVISION
DPW

DWSD MANHOLE
ERGO COVER

APPROVED:

4/16/14
CITY ENGINEER

SHEET 1 OF 1

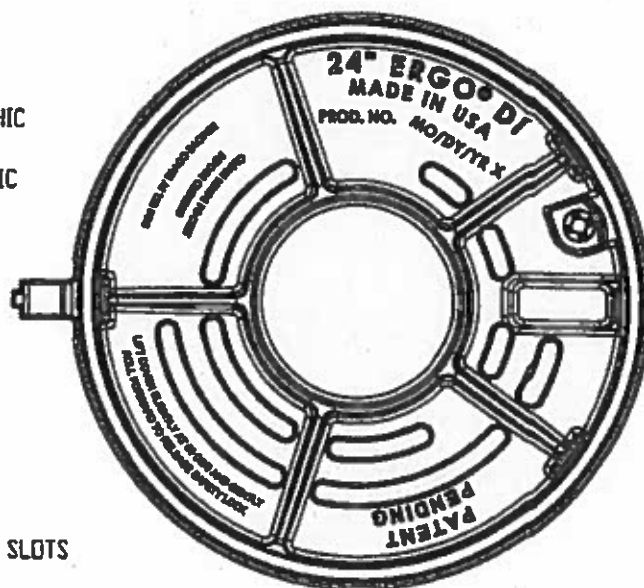
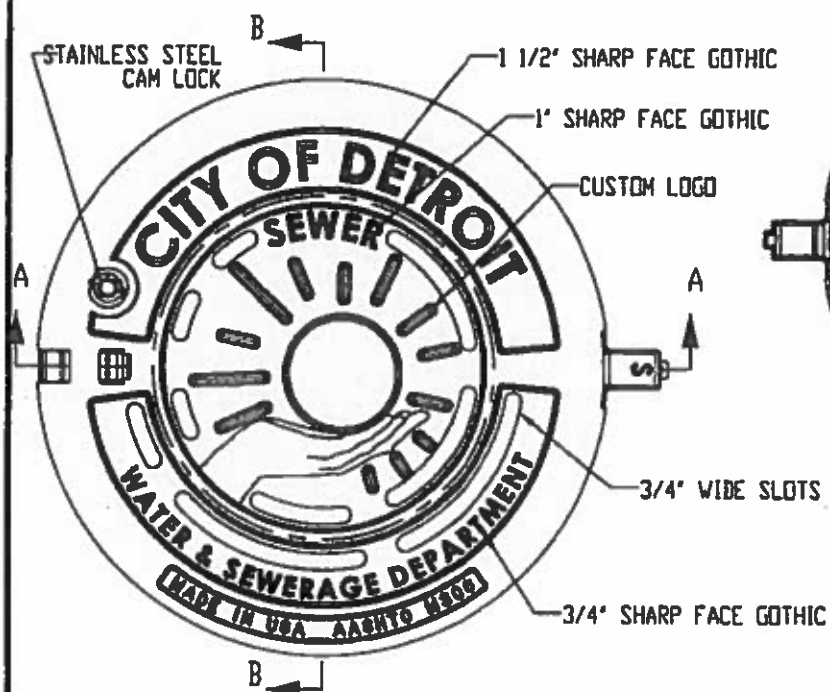
DETAIL STD. No.

DRAWING No. 111

DRAWN BY: N.Y. SANTOS

DATE: 01/5/2014

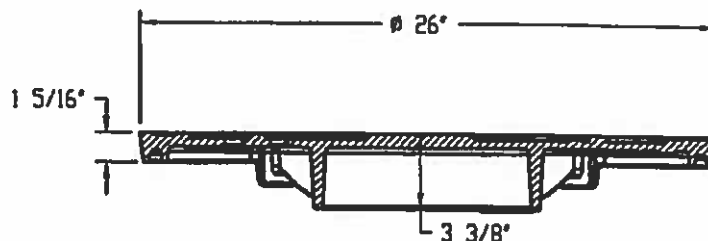
ERGO Cover



BOTTOM VIEW



SECTION A-A



SECTION B-B

DESIGN FEATURES

-MATERIALS

COVER: DUCTILE IRON (80-55-06)

-DESIGN LOAD: HEAVY DUTY

-OPEN AREA: N/A

-COATING: UNDIPPED

- DESIGNATES MACHINED SURFACE

CERTIFICATION

-ASTM A536

-COUNTRY OF ORIGIN: USA

DWSD APPROVAL: *R. Singley*DATE: *04/16/14*

CITY OF DETROIT
CITY ENGINEERING DIVISION
DPW

DWSD MANHOLE
ERGO COVER

APPROVED:

updated 4/16/14
ENGINEER OF STREETS
Li 4/16/14
CITY ENGINEER

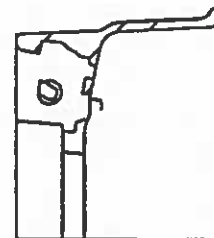
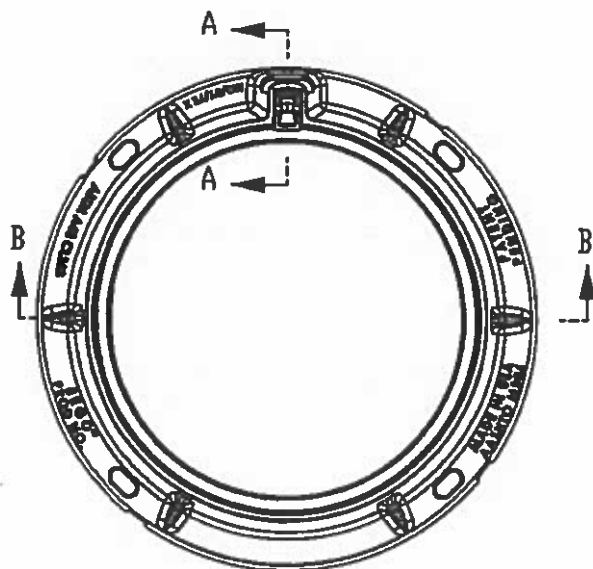
SHEET 1 OF 1

DETAIL STD. No.

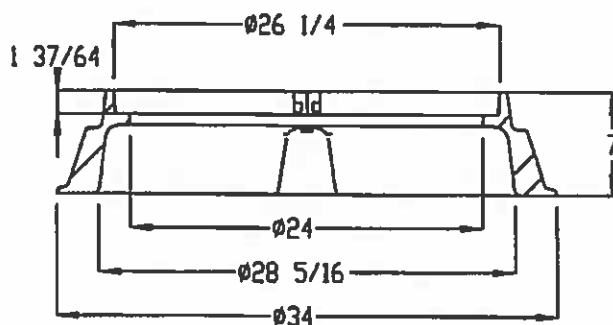
DRAWING No. 112

DRAWN BY: N.Y. SANTOS

DATE: 01/8/2014



SECTION A-A
SCALE 1 : 6



SECTION B-B

DESIGN FEATURES

-MATERIALS

FRAME: DUCTILE IRON (70-50-05)

-DESIGN LOAD: HEAVY DUTY

-OPEN AREA: N/A

-COATING: UNDIPPED

- / DESIGNATES MACHINED SURFACE

CERTIFICATION

-ASTM A536

-COUNTRY OF ORIGIN, USA

DWSD APPROVAL:

R. Smyth

DATE:

04/16/14



CITY OF DETROIT
CITY ENGINEERING DIVISION
DPW

DWSD MANHOLE
FRAME

APPROVED:

updated 4/16/14
R. Smyth
CITY ENGINEER

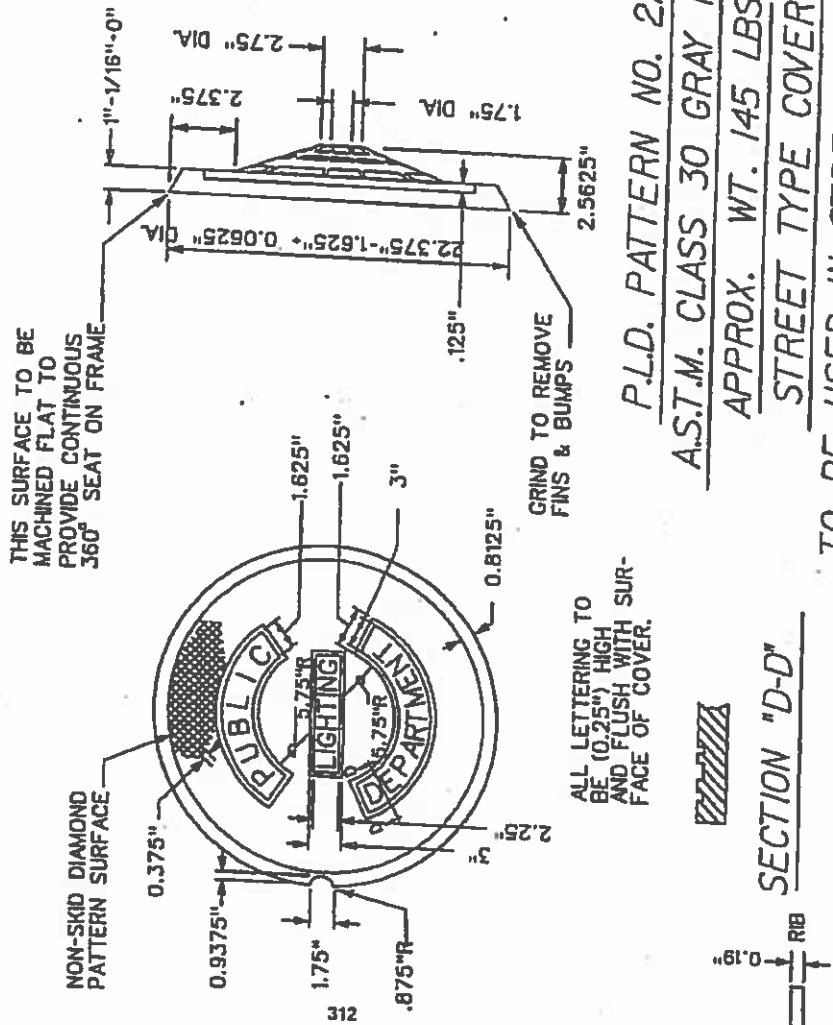
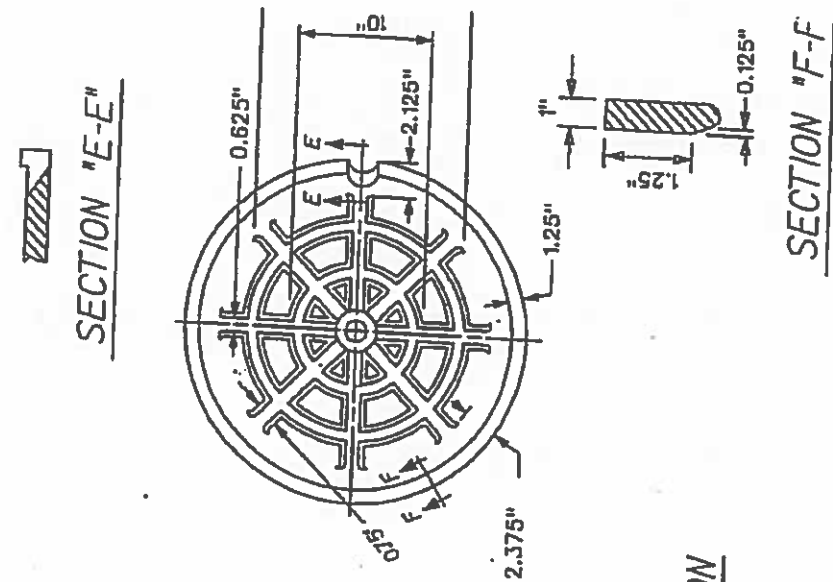
SHEET 1 OF 1

DETAIL STD. No.

DRAWING No. 113

DRAWN BY: N.Y. SANTOS

DATE: 01/15/2014



THIS SURFACE TO BE
MACHINED FLAT TO
PROVIDE CONTINUOUS
360° SEAT ON FRAME

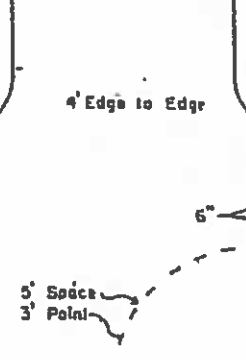
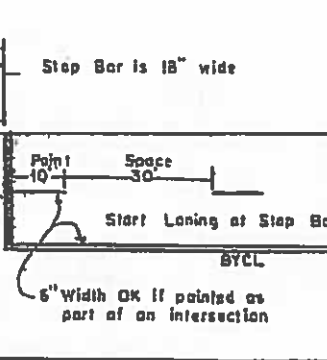
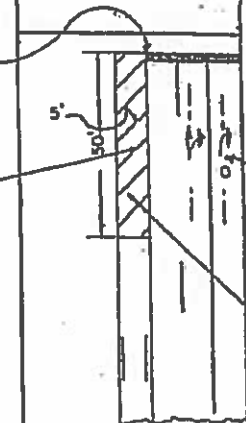
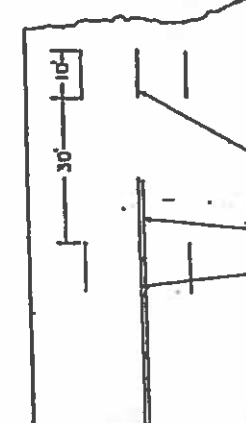

NON-SKID DIAMOND
PATTERN SURFACE

GRIND TO REMOVE
FINS & BUMPS

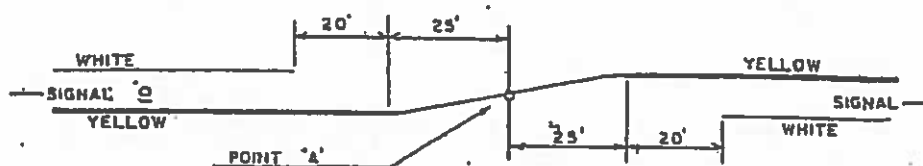
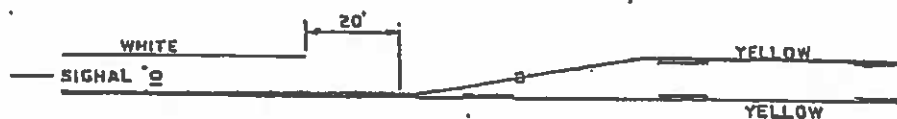
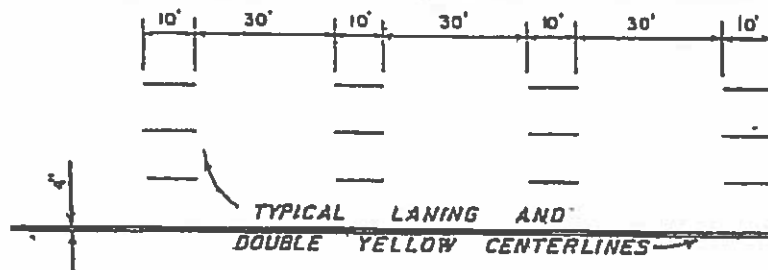
ALL LETTERING TO
BE (0.25") HIGH
AND FLUSH WITH SUR-
FACE OF COVER.

P.L.D. PATTERN NO. 2A
A.S.T.M. CLASS 30 GRAY IRON
APPROX. WT. 145 LBS.
STREET TYPE COVER

TO BE USED IN STREETS & DRIVES

INTERSECTIONS		
 <p>4' Edge to Edge</p> <p>5' Space 3' Point</p>	 <p>Stop Bar is 18" wide</p> <p>Point 10' Space 30'</p> <p>Start Lining at Stop Bar</p> <p>BYCL</p> <p>6" Width OK if painted as part of an intersection</p>	
 <p>End Stop Bar here unless the Center Lane is used for reversible flow.</p> <p>6" Wide Line</p> <p>5' Space 3' Point</p>	<p>Cross walks to be located as shown on intersection drawing and Stop Bars located from the cross walk unless indicated otherwise on the drawing.</p> <p>Symbol Legend -</p> <p>0 "ONLY"</p> <p>Island (yellow)</p> <p>See Sheet 2 for Center Left Turn Lane detail</p>	
LANING		
<p>NOTES</p> <ol style="list-style-type: none"> 1. All lining shown is 4" and 0.015" thick 2. All paint is white unless specified otherwise 3. All \mathcal{C} are yellow 	 <p>Yellow Skip \mathcal{C} is 10' point and 30' space</p> <p>Double Yellow \mathcal{C}</p> <p>4" Space edge to edge</p>	
<p>NOTE</p> <p>Do not vary unless approved by the Engineer of Signs and Markings.</p>		
 <p>CITY OF DETROIT DEPARTMENT OF TRANSPORTATION PLANNING & TRAFFIC ENGINEERING</p>	<p>FIELD MARKING STANDARDS</p> <p>1 of 4</p>	<p>DRAWN A. L. Walker SCALE None DATE March 30, 1978 NO. SG-50</p>

SUPPLEMENT SHEET: 2a

CENTER LEFT TURN LANE CROSSOVER DETAILSBETWEEN TWO SIGNALIZED INTERSECTIONSBETWEEN SIGNALIZED AND NON-SIGNALIZED INTERSECTIONSBETWEEN TWO NON-SIGNALIZED INTERSECTIONS

Notes:

Point 'A' is located mid-block unless otherwise noted.
 All lane lines and centerlines begin or end at inter-
 sectional stop bars unless otherwise noted.



CITY OF DETROIT
 DEPARTMENT OF
 TRANSPORTATION
 PLANNING & TRAFFIC ENGINEERING

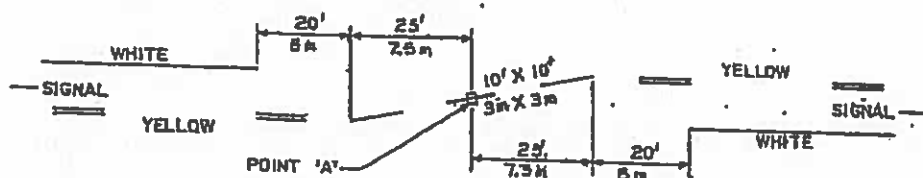
FIELD MARKING
 STANDARDS

2 of 4

DRAWN BY: L. Weller
 SCALE: 1" = 30'
 DATE: March 27, 1978

NO. SG-50

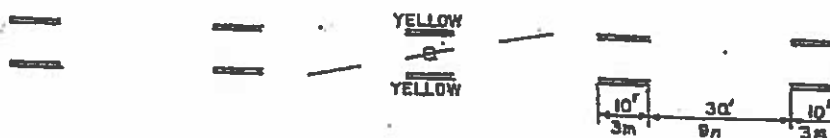
LEFT TURN & REVERSIBLE CENTER LANE DETAILS



BETWEEN TWO SIGNALIZED INTERSECTIONS



BETWEEN SIGNALIZED AND NON-SIGNALIZED INTERSECTIONS



BETWEEN TWO NON-SIGNALIZED INTERSECTIONS

REVISED 1-24-97 A3



CITY OF DETROIT
DEPARTMENT OF
TRANSPORTATION
Transportation Engineering

PA

FIELD MARKING
STANDARDS

METRIC SCALE 25mm = 1m

DRAWN Dennis R. Ellis
SCALE 1" = 30'
DATE 8 June 81

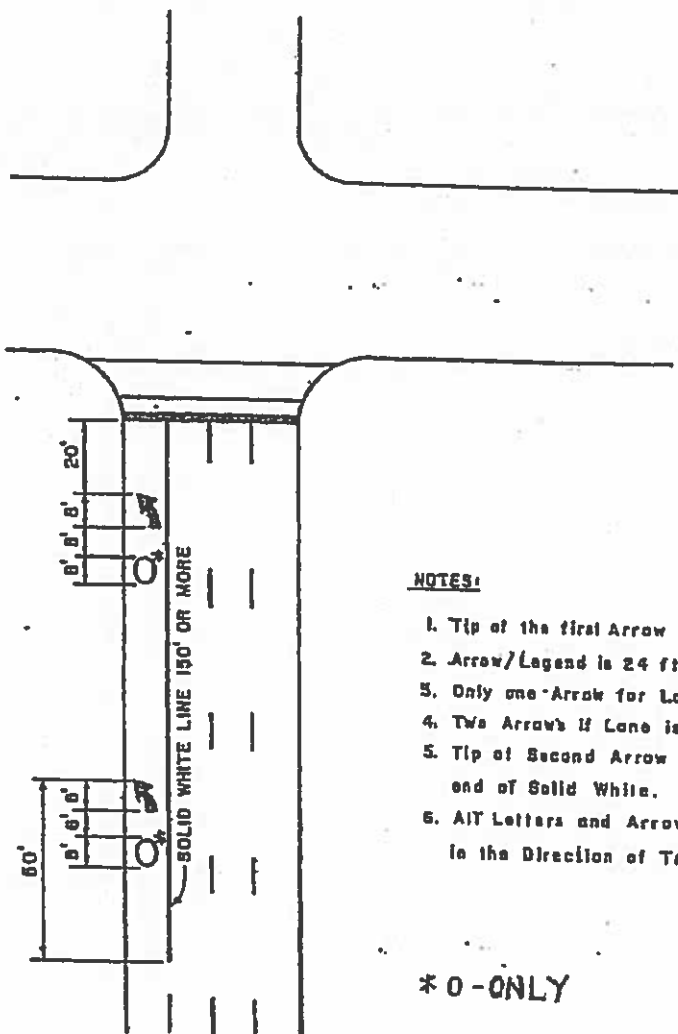
NO: SG-50

3 of 4

TELEPHONE ROOM

NO. 1000

SYMBOLS

NOTES:

1. Tip of the first Arrow 20 ft. from Stop Bar.
2. Arrow/Legend is 24 ft. long.
3. Only one Arrow for Lanes less than 150 ft.
4. Two Arrows if Lane is 150 ft. or more.
5. Tip of Second Arrow is located 50 ft. from end of Solid White.
6. All Letters and Arrows are White and read in the Direction of Travel.



CITY OF DETROIT
DEPARTMENT OF
TRANSPORTATION
Transportation Engineering

FIELD MARKING STANDARDS

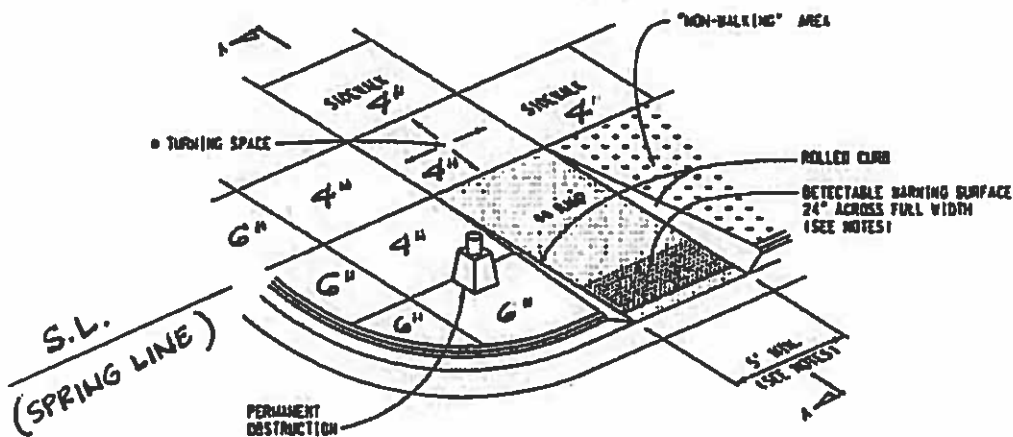
4 of 4

DRAWN E.W. Ppluch
SCALE 1" = 40'
DATE Sept. 27, 1991

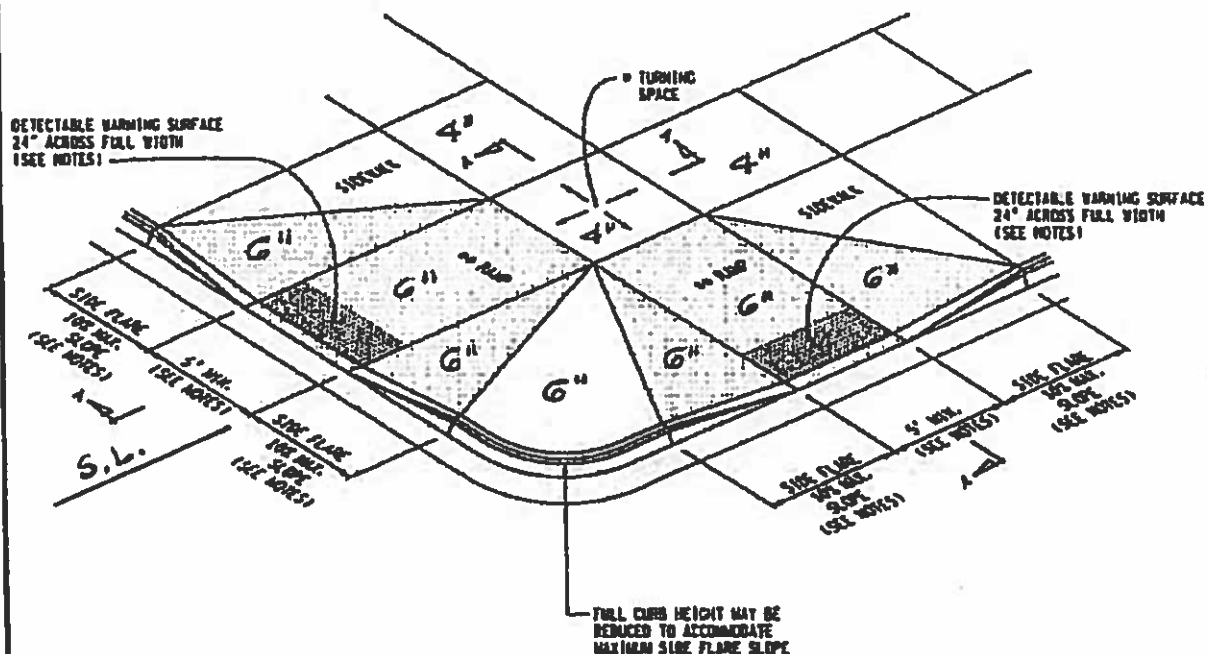
NO. S6-50

• MAXIMUM TURNING SPACE SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

• MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5:1 TO 7:1 (0.3% MAXIMUM). SEE NOTES.



SIDEWALK RAMP TYPE R
(ROLLED SIDES)



SIDEWALK RAMP TYPE F
(FLARED SIDES, TWO RAMPS SHOWN)

MDOT
Michigan Department of Transportation

PREPARED BY
DESIGN DIVISION
DRAWN BY: J.L.C.
CHECKED BY: U.S.P.

DEPARTMENT DIRECTOR
104 T. Shuck

APPROVED BY:

Randy V. Pelt
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY:

Mal'ia Van Pelt
DIRECTOR, BUREAU OF HIGHWAY DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

**SIDEWALK RAMP AND
DETECTABLE WARNING DETAILS**

2-30-2014
F.S.E.L. APPROVAL

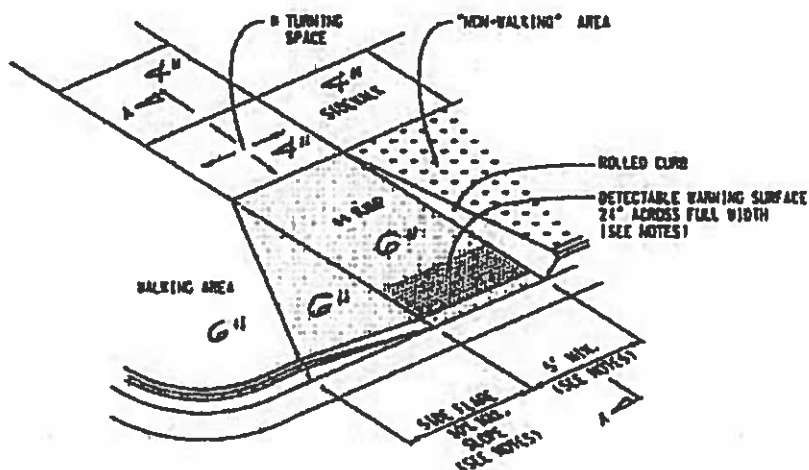
7-1-2014
PLAN DATE

R-28-1

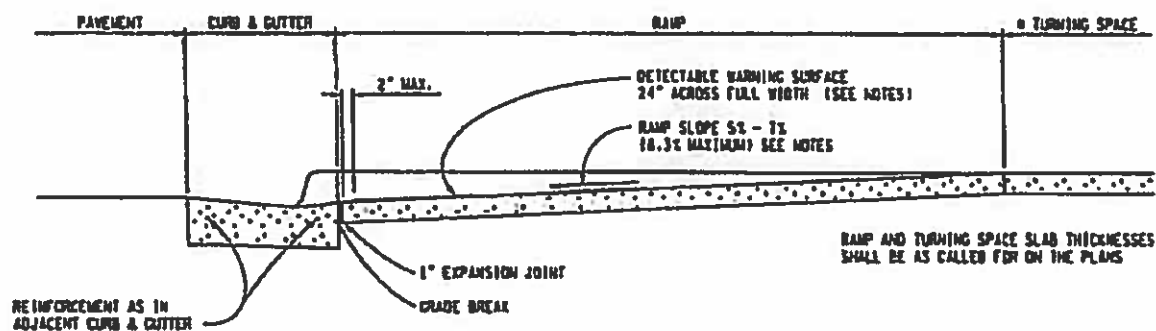
SHEET
1 OF 1

• MAXIMUM TURNING SPACE SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

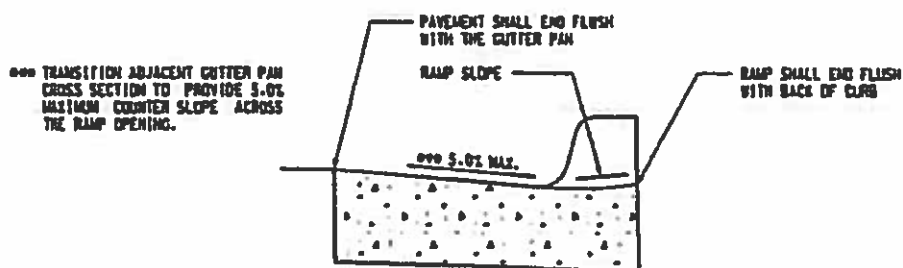
•• MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



SIDEWALK RAMP TYPE RF
(ROLLED / FLARED SIDES)



SECTION A-A



SECTION THROUGH CURB CUT
(TYPICAL ALL RAMP TYPES)

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

**SIDEWALK RAMP AND
DETECTABLE WARNING DETAILS**

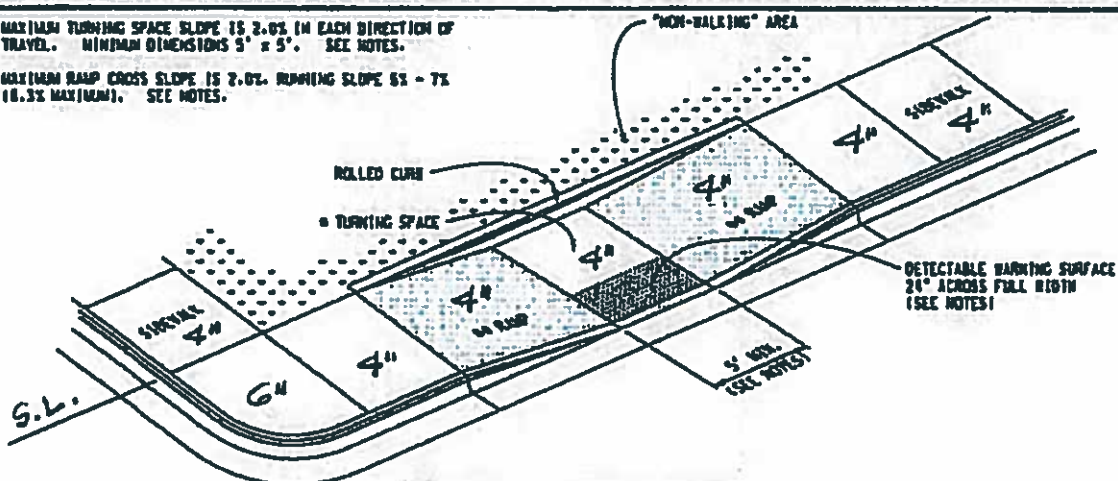
9-30-2014
F.A.L. APPROVAL

7-1-2014
PLAN DATE

R-28-1

SHEET
2 OF 7

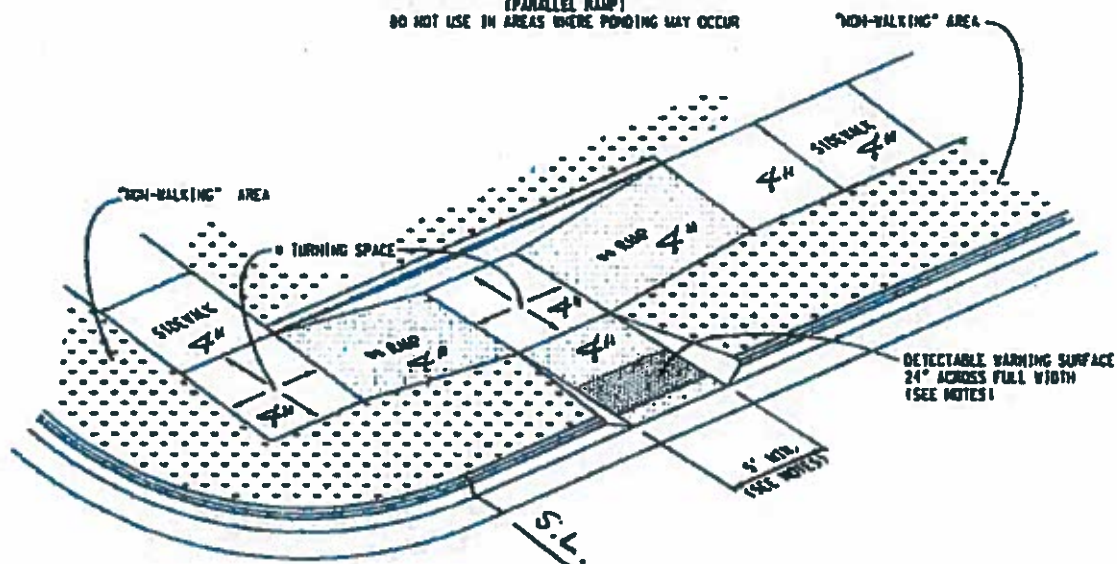
- MAXIMUM TURNING SPACE SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.
- MAXIMUM RAMP CROSS SLOPE IS 2.0%. RAMPING SLOPE 6% - 7% (8.3% MAXIMUM). SEE NOTES.



SIDEWALK RAMP TYPE P

(PARALLEL RAMP)

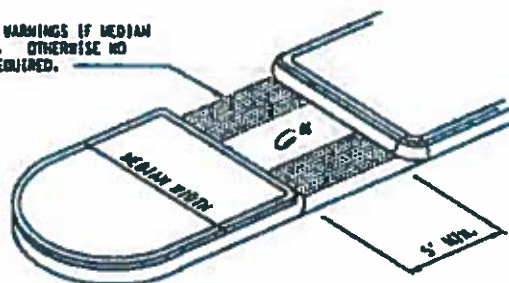
DO NOT USE IN AREAS WHERE PONDING MAY OCCUR



SIDEWALK RAMP TYPE C

(COMBINATION RAMP)

USE 24\"/>



SIDEWALK RAMP TYPE M

(MEDIAN ISLAND)

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

8-30-2014
F.A.S.L. APPROVAL

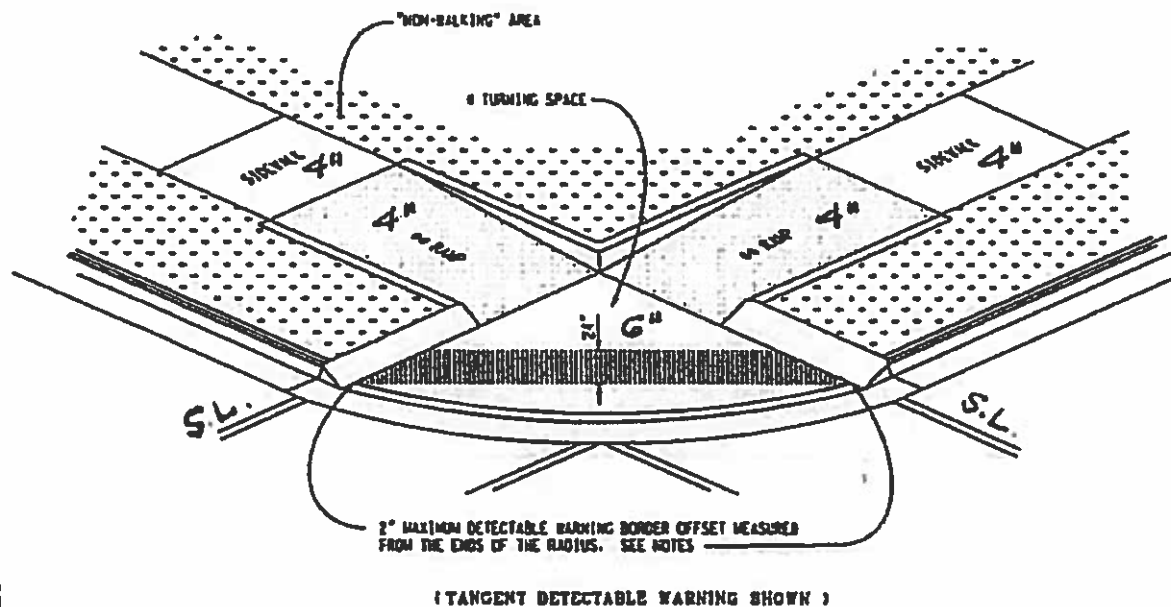
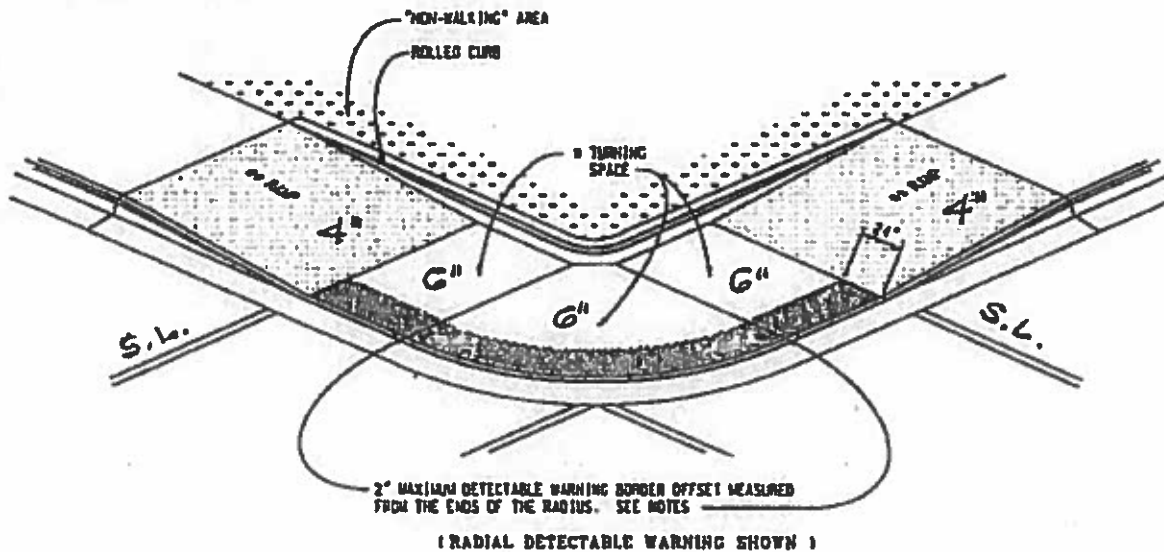
7-1-2014
PLAN DATE

R-28-I

SHEET
3 OF 7

• MAXIMUM TURNING SPACE SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

• MAXIMUM RAMP CROSS SLOPE IS 2.0%. TURNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



SIDEWALK RAMP TYPE D

(DEPRESSED CORNER)

USE ONLY WHEN INDEPENDENT DIRECTIONAL RAMPS CAN NOT BE CONSTRUCTED FOR EACH CROSSING DIRECTION

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

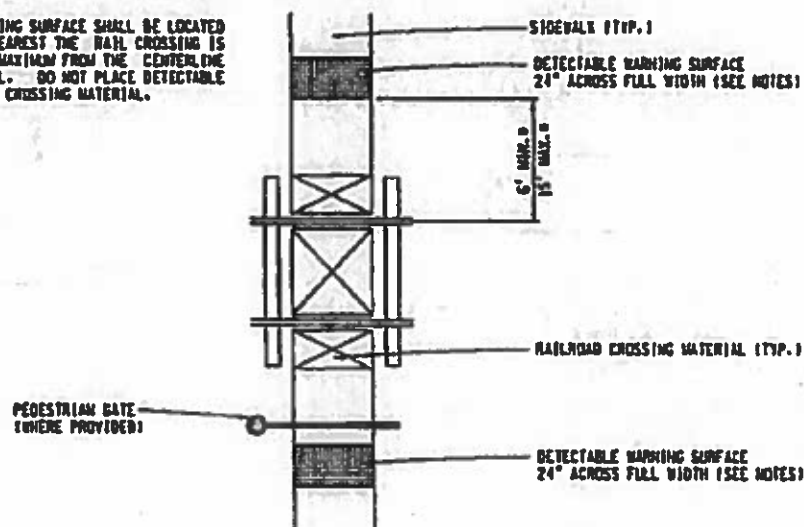
9-30-2014
F.L.L. BROWN

7-1-2014
F.L.B.

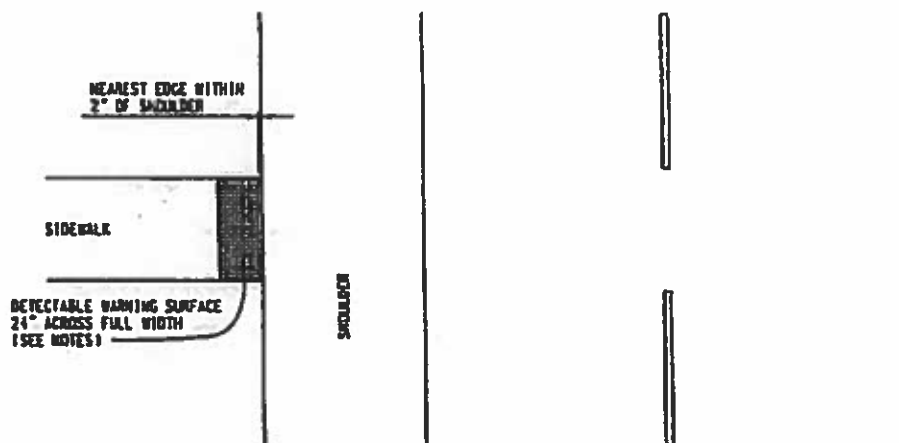
R-28-I

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4 OF 7

- THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE RAIL CROSSING IS 6' MINIMUM AND 15' MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL. DO NOT PLACE DETECTABLE WARNING ON RAILROAD CROSSING MATERIAL.



DETECTABLE WARNING AT RAILROAD CROSSING



DETECTABLE WARNING AT FLUSH SHOULDER OR ROADWAY

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

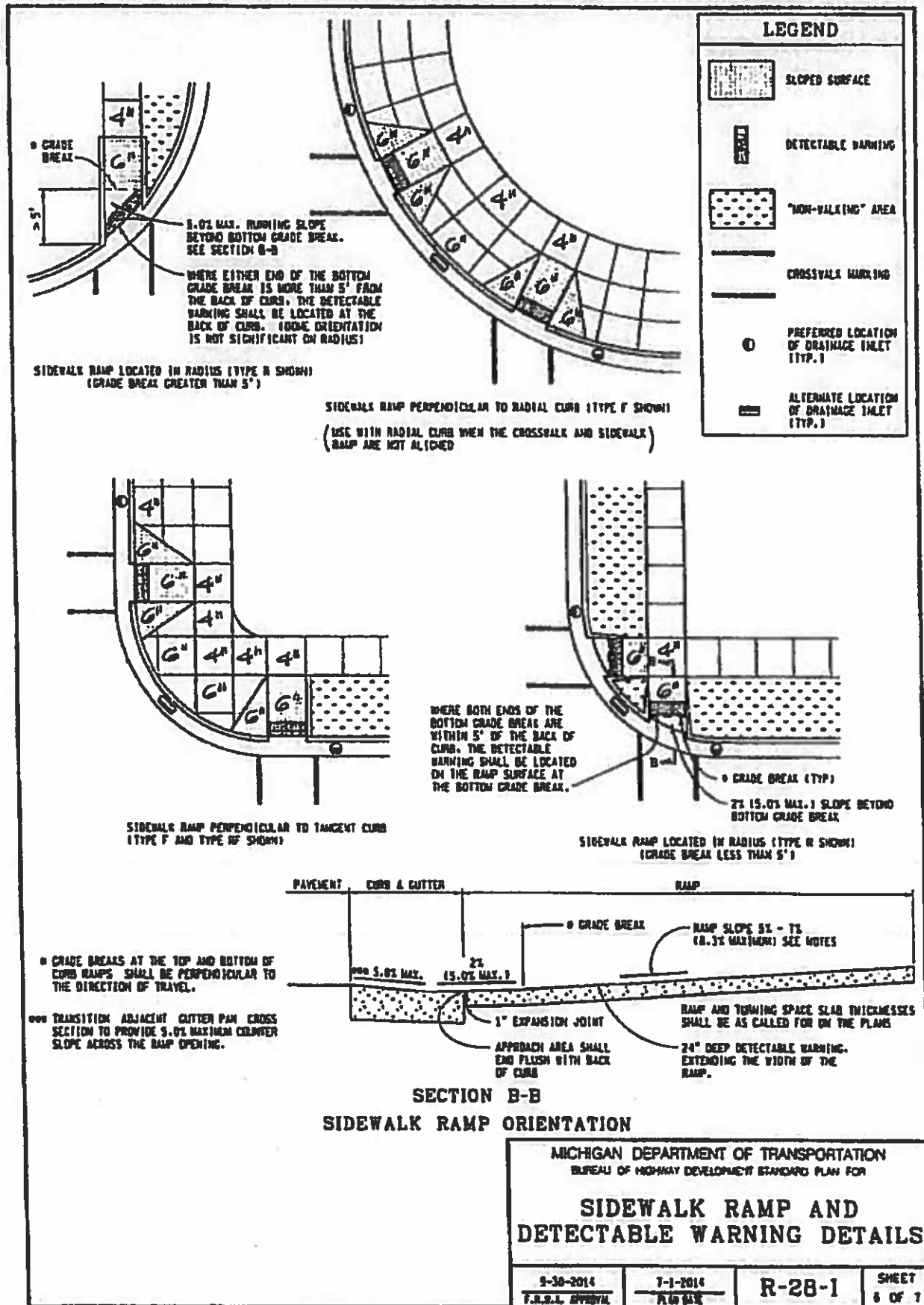
**SIDEWALK RAMP AND
DETECTABLE WARNING DETAILS**

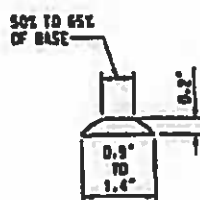
9-30-2014
F.R.E.L. OFFICIAL

7-1-2014
PLAN DATE

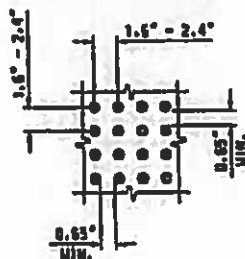
R-28-I

SHEET
5 OF 7



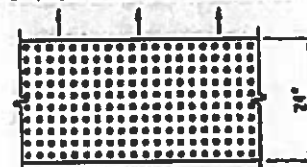


DOME SECTION



DOME SPACING

ALIGNED IN DIRECTION OF TRAVEL AND
PERPENDICULAR (OR RADIAL) TO GRADE BREAK



DOME ALIGNMENT

DETECTABLE WARNING DETAILS

NOTES:

DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION, RECONSTRUCTION, OR ALTERATION OF STREETS, CURBS, OR SIDEWALKS IN THE PUBLIC RIGHT OF WAY.

SIDEWALK RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COARSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

SIDEWALKS SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP, WHERE CONDITIONS PERMIT. IT IS DESIRABLE THAT THE SLOPE OF THE RAMP BE IN ONLY ONE DIRECTION, PARALLEL TO THE DIRECTION OF TRAVEL.

RAMP WIDTH SHALL BE INCREASED, IF NECESSARY, TO ACCOMMODATE SIDEWALK SHOT REMOVAL EQUIPMENT NORMALLY USED BY THE MUNICIPALITY.

PROVIDE TURNING SPACES WHERE PEDESTRIAN TURNING MOVEMENTS ARE REQUIRED.

WHEN 5' MINIMUM WIDTHS ARE NOT FEASIBLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 4' AND TURNING SPACES TO NOT LESS THAN 4' x 4'.

DETECTABLE WARNING SURFACE COVERAGE IS 24" MINIMUM IN THE DIRECTION OF RAMP/PATH TRAVEL AND THE FULL WIDTH OF THE RAMP/PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2" MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.

FOR NEW ROADWAY CONSTRUCTION, THE RAMP CROSS SLOPE MAY NOT EXCEED 2.0%. FOR ALTERATIONS TO EXISTING ROADWAYS, THE CROSS SLOPE MAY BE TRANSITIONED TO MEET AN EXISTING ROADWAY GRADE. THE CROSS SLOPE TRANSITION SHALL BE APPLIED UNIFORMLY OVER THE FULL LENGTH OF THE RAMP.

THE MAXIMUM RUNNING SLOPE OF 8.3% IS RELATIVE TO A FLAT 10% REFERENCE. HOWEVER, IT SHALL NOT REQUIRE ANY RAMP OR SERIES OF RAMPS TO EXCEED 15 FEET IN LENGTH.

DRAINAGE STRUCTURES SHOULD NOT BE PLACED IN LINE WITH RAMPS. THE LOCATION OF THE RAMP SHOULD TAKE PRECEDENCE OVER THE LOCATION OF THE DRAINAGE STRUCTURE. WHERE EXISTING DRAINAGE STRUCTURES ARE LOCATED IN THE RAMP PATH OF TRAVEL, USE A MANUFACTURER'S ADA COMPLIANT GRATE. OPENINGS SHALL NOT BE GREATER THAN 1/4". ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

TRANSITION THE CUTTER PAN CROSS SECTION SUCH THAT THE COUNTER SLOPE IN THE DIRECTION OF RAMP TRAVEL IS NOT GREATER THAN 3.0%. MAINTAIN THE NORMAL CUTTER PAN CROSS SECTION ACROSS DRAINAGE STRUCTURES.

THE TOP OF THE JOINT FILLER FOR ALL RAMP TYPES SHALL BE FLUSH WITH THE ADJACENT CONCRETE.

CROSSWALK AND STOP LINE MARKINGS, IF USED, SHALL BE SO LOCATED AS TO STOP TRAFFIC SHORT OF RAMP CROSSINGS. SPECIFIC DETAILS FOR MARKING APPLICATIONS ARE GIVEN IN THE "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

FLARED SIDES WITH A SLOPE OF 10% MAXIMUM, MEASURED ALONG THE ROADSIDE CURB LINE, SHALL BE PROVIDED WHERE AN UNOBSTRUCTED CIRCULATION PATH LATERALLY CROSSES THE SIDEWALK RAMP. FLARED SIDES ARE NOT REQUIRED WHERE THE RAMP IS BORDERED BY LANDSCAPING, UNPAVED SURFACE OR PERMANENT FIXED OBJECTS, WHERE THEY ARE NOT REQUIRED. FLARED SIDES CAN BE CONSIDERED IN ORDER TO AVOID SHARP CURB RETURN AT RAMP OPENINGS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND/OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

9-30-2014
T.B.C.L. APPROVAL

7-1-2014
PLAN DATE

R-28-I

SHEET
1 OF 1

CPO 2913189

**CONTRACT FOR
PW-6972 HMA RESURFACING AND MISCELLANEOUS
CONSTRUCTION ON
W. GRAND BLVD. BETWEEN WOODWARD & LINWOOD,
W. VERNOR BETWEEN MICHIGAN & 17TH,
W VERNOR BETWEEN FISHER FREEWAY & LIVERNOIS
AND W. VERNOR BETWEEN DIX & CENTRAL
FOR THE DEPARTMENT OF PUBLIC WORKS**

**FORT WAYNE CONTRACTING, INC./AJAX PAVING
INDUSTRIES, INC. A JOINT VENTURE
320 E. SEVEN MILE ROAD
DETROIT, MI 48203
\$3,868,460.92**

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DIVISION

SPECIAL NOTICE TO BIDDERS
STANDARD INSTRUCTIONS TO BIDDERS

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PART II - CONDITIONS
PART III – NAME, ADDRESS, LEGAL STATUS AND SIGNATURE OF BIDDER
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CORPORATE ACKNOWLEDGMENT
CORPORATION CERTIFICATE OF AUTHORITY
BID BOND
PERFORMANCE BOND
PAYMENT BOND

EQUALIZATION ELIGIBILITY FORM
AFFIDAVIT OF ELIGIBILITY FOR EQUALIZATION CREDIT
PREVAILING WAGE ORDINANCE AND CONTRACTOR CERTIFICATION
SLAVERY ERA RECORDS & INSURANCE DISCLOSURE ORDINANCE AND
AFFIDAVIT
EXECUTIVE ORDER 2007-1
HIRING POLICY & COMPLIANCE AFFIDAVIT
CERTIFIED PAYROLL

GENERAL CONDITIONS
PREVAILING WAGE RATES

SECTION II

Michigan Department of Transportation Local Agency Program Guidelines for Geometrics
(3R) dated August 28, 2008 (Issued Separately)

Michigan Department of Transportation Standard Specifications for Construction, 2012
Version (Issued Separately)

SECTION III

Drawings and Special Provisions

SPECIAL NOTICE TO BIDDERS**1. GENERAL PURPOSE**

The Special Notice to Bidders contains information and requirements applying specifically to this particular Contract. The Special Notice to Bidders supplements the Standard Instructions to Bidders and, in case of any discrepancy between the requirements in the former and latter, the provisions in the Special Notice to Bidders shall govern.

The published advertisement for the proposed Contract also contains information necessary to the bidders and is to be considered a part of the Special Notice to Bidders as if fully herein repeated.

2. DESCRIPTION OF WORK

The work consists, in general, of approximately 3.6 miles of cold milling HMA surface, HMA resurfacing, concrete curb, sidewalk, curb ramps, HMA approaches, drainage structure adjustments, pavement removal and replacement, lane ties, pavement markings and other miscellaneous construction on W. Grand Blvd. between Woodward & Linwood, W. Vernor between Michigan & 17th, W. Vernor between Fisher Freeway & Livernois, and W. Vernor between Dix & Central.

3. BITUMINOUS MATERIAL PLANT

It is not necessary that the Contractor's plant be owned and operated by the successful bidder. However, it will be necessary that the materials be obtained from an existing plant which meets all Contract requirements. Further, any bidder not operating his own plant shall indicate in his Proposal the owner and the locations of the plants from which the bituminous materials will be obtained.

4. MATERIAL STORAGE YARDS

The City Zoning Ordinance provides for the restriction of material storage yards in certain residential areas. Bidders proposing to use such yards should satisfy themselves that the locations contemplated can be used, and if a permit is required, shall obtain such permit from the Buildings and Safety Engineering and Environmental Department and pay all costs in the connection therewith.

5. CONTRACT DOCUMENTS

The Contract Documents are composed of those individual parts as named by title in Article 2 of the Standard Instructions to Bidders.

Section I contains the Standard Contract Forms.

Section II consists 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction and the 2009 Michigan Manual of Uniform Traffic Control Devices as amended by Bulletin.

Section III consists of separate drawings prepared by the City Engineering Division together with any other Detailed Specifications, Supplemental and Special Provisions included in these documents.

SPECIAL NOTICE TO BIDDERS**6. SPECIAL FORMS**

Bidders will note that a copy of each of the following pages has been included:

Equalization Requirements, Eligibility Form and Affidavit of Eligibility
Prevailing Wage Ordinance & Affidavit
Slavery Era Records & Insurance Disclosure Ordinance and Affidavit
Hiring Compliance Policy & Affidavit
Proposal Signature Pages
Agreement Signature Page
Acknowledgment - City
Acknowledgment - Corporation
Acknowledgment - Sole Proprietorship or Partnership
Resolution of Corporate Authority
Certificate of Partnership Authority

Each set of the applicable documents is to be completed, signed, and returned with the proposal. These will later be used in preparing the executed Contract for the accepted bid.

7. HUMAN RIGHTS CLEARANCE

Attached is a copy of the Covenant of Equal Opportunity from the Human Rights Department of the City of Detroit. Both the low and the second bidder will be required to furnish the information to the DPW-City Engineering Division for submission to the Human Rights Department, prior to award of the Contract.

A Human Rights review of employment goals may be required for each project, regardless of prior clearances.

8. CONTRACTOR AUTHORITY TO START WORK

The Contractor will have no authority to start work, no payments will be authorized by the Finance Department, and the City of Detroit will not be liable for reimbursement for any materials purchased or payment for any services rendered by the Contractor prior to the award of this Contract by resolution of the City Council and execution of this instrument by the Purchasing Director.

9. INDEPENDENT CONTRACTOR

The relationship of the Contractor to the City of Detroit is and shall continue to be that of an independent contractor, and no liability or benefits, such as workers' compensation, pension rights or liabilities, insurance rights or liabilities, or other provisions or liabilities arising out of or relating to a Contract for hire of employer/employee relationship shall arise or accrue to either party or either party's agent or employee with respect to the City of Detroit as a result of the performance of this Contract, unless expressly stated in this Contract.

10. WAIVER

The Contractor shall not hold the City liable for any personal injury incurred by any employee, agents, or consultants while working on this project which is not held in a court of competent jurisdiction to be directly attributable to the gross negligence of the City or any employee of the City acting within the scope of their employment and hereby agrees to hold the City harmless from any such claim by its employees, agents or consultants.

SPECIAL NOTICE TO BIDDERS**11. AUDIT**

Nothing contained in this Contract shall be construed or permitted to operate as any restriction upon the power granted to the City Council by the City Charter to audit and allow all accounts chargeable against the City.

12. INDEMNITY AND DAMAGES

A. The Contractor agrees to save harmless the City against and from any and all liabilities, obligations, damages, penalties, claims, costs, charges, losses and expenses including without limitation, reasonable fees and expenses for attorneys (at the prevailing market rate for such legal services, expert witnesses and other consultants), which may be imposed upon, incurred by or asserted against the City by reason of any of the following occurring during the term of this Contract:

1. Any negligent or tortuous act, error or omission of the Contractor or any of its Associates for whose acts any of them might be liable, regardless of whether or not it is caused in part by a person indemnified hereunder.
2. Any failure by the Contractor or any of its Associates to perform its obligations, either expressed, or implied under this Contract.

The Contractor also agrees to hold the City harmless from any and all injury to the person or damage to the property of, or any loss or expense incurred by an employee of the City which arises out of or pursuant to the Contractor's performance, or that of its Associates under this Contract.

- B. The Contractor undertakes and assumes all risk of dangerous conditions, if any, in and about any City premises and agrees to make an examination of all places where it will be performing the Services in order to determine whether such places are safe for the performance of the Services. The Contractor also agrees to waive and release any claim or liability against the City for personal injury or property damage sustained by it or its associates for personal injuries or property damage while performing under this Contract on premises which are not owned by the City.
- C. In the event any action or proceeding shall be brought against the City by reason of any claim covered hereunder, the Contractor, upon notice from the City, will at its sole cost and expense, resist and defend the same with counsel of the Contractor's choice which is acceptable to the City.
- D. The Contractor agrees that it is its responsibility and not the responsibility of the City to safeguard the property and materials that it or any of its Associates use or have in their possession while performing this Contract. Further, the Contractor agrees to hold the City harmless for any loss of such property and materials used by any such person pursuant to the Contractor's performance under this Contract or which is in their possession.
- E. The indemnification obligation under this Article shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor under Workers Compensation Acts or other employee benefit acts. In addition, the Contractor agrees to hold the City harmless from the payment of any deductible on any insurance policy.

SPECIAL NOTICE TO BIDDERS**12. INDEMNITY AND DAMAGES** (Continued)

- F. The Contractor agrees that this Article 12 Indemnity and Damages shall apply to all matters described in Article 12-A, Indemnity and Damages, (whether the matter is litigated or not) which occur or arise between the Contractor or its Associates, and the City, and agrees to save the City harmless there from as provided in this Article 12.

13. TERMINATION FOR CONVENIENCE

The City may terminate this Contract without cause at any time, without incurring any further liability whatsoever, other than as stated in this provision, by giving written notice to the Contractor of such termination, specifying the effective date thereof, at least fifteen (15) days prior to the effective date of such termination. If the Contract is terminated, the City will pay the Contractor only for the services rendered prior to termination, including any holdback. The amount of the payment shall be computed by the City on the basis of the services rendered, and such other means which, in the judgment of the City, represents a fair value of the services provided, less the amount of any previous payments made, which final payment the Contractor agrees shall constitute full and complete payment and satisfaction under this Contract. Should the City or the City's designee undertake any part of the services which are to be performed by the Contractor, to the extent such services are being performed by the City or its designee the Contractor shall not be entitled to any compensation for the services so performed. This section is subject to the maximum sum payable provision of this Contract.

14. RIGHTS, REMEDIES AND JURISDICTION

The rights and remedies set forth herein are not exclusive and are in addition to any of the rights and remedies provided by law or equity. All actions arising under this Contract shall be governed by, subject to, and construed according to the laws of the State of Michigan. The Contractor agrees, consents and submits to the personal jurisdiction of any competent court in Wayne County, Michigan, for any action brought against it arising out of this Contract. The Contractor agrees that service of process at the address and in the manner specified in this Contract will be sufficient to put the Contractor on notice. The Contractor also agrees that it will not commence any action against the City because of any matter whatsoever arising out of or relating to the validity, construction, interpretation and enforcement of this Contract, in any courts other than those in the County of Wayne, State of Michigan.

15. COMPARABLE OR EQUIVALENT TERMS

The Contractor warrants that all of the prices, terms, warranties, and benefits granted to the City herein are comparable to or better than the equivalent terms being offered by the Contractor to any present customer for like or similar services. In addition to the other remedies, which the City may invoke herein for the Contractor's breach, it may demand repayment of any overpayment plus interest.

16. BASIS OF PROPOSAL

The Proposal is on a unit price basis in accordance with Article 7E of the Standard Instructions to Bidders.

SPECIAL NOTICE TO BIDDERS**17. CITY OFFICER**

The title and post office address of the officer named in the Agreement as acting on behalf of the City is:

**Director - Department of Public Works
Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 802
Detroit, Michigan 48226**

18. BOND REQUIREMENTS

The amount of the Performance and Payment Bonds required shall be as follows:

TYPE OF CONTRACT	PERFORMANCE BOND	PAYMENT BOND
City of Detroit financed contracts of \$50,000 and under	25% of contract price	25% of contract price
City of Detroit financed contracts over \$50,000 but under \$1,000,000	50% of contract price	50% of contract price
All contracts over \$1,000,000 or those financed by Federal funds	100% of contract price	100% of contract price

19. INSURANCE

The Contractor shall maintain, at its expense, during the term of this contract the following insurance:

<u>TYPE</u>	<u>AMOUNT NOT LESS THAN</u>
A. Worker's Compensation Insurance	Statutory limit
Employer's Liability Insurance	\$500,000 minimum each accident/each disease/disease each employee
B. Commercial General Liability Insurance (Coverage to include blanket contractual liability)	\$1,000,000 minimum combined single limit per occurrence \$2,000,000 minimum aggregate limit
C. Automobile Liability Insurance (covering all owned, hired and non-owned vehicles with personal and property protection insurance to comply with the provisions of the Michigan No-Fault Insurance Act, including residual liability insurance)	\$1,000,000 minimum combined single limit
D. Umbrella Excess Liability Insurance	\$4,000,000 minimum combined single limit per occurrence/aggregate

The commercial general liability insurance policy shall name as an additional insured: "The City of Detroit" and shall state that the Contractor's insurance is primary, as respect to the City of Detroit as an additional insured, and not excess over any insurance already carried by the City of Detroit.

The commercial general liability insurance shall provide blanket contractual liability insurance for all written contracts or in the alternative, shall contain a specific endorsement worded substantially as follows:

"During the effective period of the policies mentioned herein, it is agreed that this insurance specifically covers liability assumed by the insured under the provisions of CPO No. 2913189 dated _____ entered into by the insured and the City of Detroit".

SPECIAL NOTICE TO BIDDERS**19. INSURANCE** (Continued)

If the Commercial General Liability policy does not contain the standard ISO (Insurance Services Office) wording of "definition of insured" which reads essentially as follows: "The insurance afforded applies separately to each insured... except with respect to limits, then, in the alternative, the public liability insurance policy shall contain the following cross liability endorsement:

"It is agreed that the inclusion of more than one (1) insured under this policy shall not affect the rights of any insured as respects any claim, suit or judgment made or brought by or for any other insured or by or for any employee of any other insured. This policy shall protect each insured in the same manner as though a separate policy had been issued to each, except nothing herein shall operate to increase the insurer's liability beyond the amount or amounts for which the insurer would have been liable had only one (1) insured been named."

19.01 If during the term of this Contract changed conditions or other pertinent factors should in the reasonable judgment of the City render inadequate the insurance limits, the Contractor will furnish on demand such additional coverage or types of coverage as may reasonably be required under the circumstances. All such, insurance shall be effected at the Contractor's expense, under valid and enforceable policies, issued by insurers of recognized responsibility which are well-rated by national rating organizations and are acceptable to the city.

19.02 All policies shall name the Contractor as the insured except as otherwise stated and shall be accompanied by a commitment from the insurer that such policies shall not be canceled, or reduced without at least thirty (30) days' prior written notice to the City. Certificates of insurance evidencing such coverage shall be submitted to the **Finance Department, Accounts Payable Section, Coleman A. Young Municipal Center, 2 Woodward Avenue, Suite 1006, Detroit, MI 48226** prior to the commencement of performance under this Contract and at least fifteen (15) days prior to the expiration dates of expiring policies.

19.03 If any work is sublet in connection with this Contract, the Contractor shall require each Subcontractor to effect and maintain the types and limits of insurance as requested by the City and shall require documentation of same, copies of which documentation shall be promptly furnished the City.

19.04 The Contractor shall be responsible for payment of all deductibles contained in any insurance required hereunder. The provisions requiring the Contractor to carry the insurance required under this Article shall not be construed in any manner as waiving or restricting the liability of the Contractor under this Contract.

19.05 The Commercial General Property Damage Insurance shall provide coverage for the so called "X"-explosion, "C" - collapse, and "U" - underground damage hazards or exposures.

Automobile Insurance covering all owned, non-owned or hired automobiles, with a minimum **\$1,000,000** combined single limit for Bodily Injury and/or Property Damage for each accident. Such insurance shall comply with the provisions of the Michigan No-Fault Insurance Law, and shall provide coverage for personal protection insurance, property protection insurance, and residual liability insurance, and shall name the City of Detroit as an additional insured.

Fire Insurance - Not Required.

19.06 The Contractor shall hold the City harmless for payment of any deductibles required pursuant to any such policies.

SPECIAL NOTICE TO BIDDERS**20A. TIME OF STARTING AND COMPLETING WORK**

The stipulated time for fully completing the entire work has taken into account, and an allowance made for, the time normally required for a "punch list" and final cleanup, and also for inclement weather during the months in which work will be in progress. It also includes an allowance for the concrete curing period.

The Contractor shall schedule the various operations so that each contract may be fully completed within the time allowed. Completion of the application of the resurfacing materials themselves will not be considered in compliance with the Contract provisions requiring full completion within the time stipulated.

- A. **Single Contract:** A bidder who has been awarded only a single pavement resurfacing contract, shall begin his operations at the site of the work on the date ordered in the written notice of the Engineer, and shall fully complete the entire work thereunder within **60 calendar days** after the issuance of the start work notice in accordance with the provisions of Article 3 of the Agreement. **The contract will terminate on December 31, 2017.**
- B. **Multiple Contracts:** A bidder who currently has two or more awarded pavement resurfacing contracts on which work has not been started, may be permitted to start work on such contracts on dates selected by him provided that such dates are first submitted to and approved in writing by the Engineer. The City, however, through the Engineer, may order the starting of any particular Contract or Contracts on specific dates when, in the judgement of the Engineer, so doing is in the best interest of the City.

The contractor's request for approval of a selected date for start of work on a specific contract shall be on forms provided by the City and shall be submitted to the Engineer at least three working days, exclusive of Saturday and Sunday, prior to the selected date.

When a selected date has been approved by the Engineer, the contractor will be expected to start work on such date and the time allowed for date, unless a revised request is submitted to and approved by the Engineer. A revised request will, ordinarily, be favorably considered and approved only when the contractor's other Detroit pavement resurfacing work makes the previously selected and approved date impractical or impossible.

The time of starting and completing work on multiple pavement resurfacing contracts shall be predicated on:

1. Construction operations being carried on at a rate of progress to ensure completion within the stipulated time allowed for completion.
2. Construction operations being carried on without unnecessary delays and no phase of the work on other contracts to be started to the prejudice of the same phase on a contract previously started.
3. The work on all contracts being fully completed by not later than **November 1st** of the current calendar year. Carry over work, if permitted, to the following calendar year construction season shall be at no change in contract proposal unit prices.

SPECIAL NOTICE TO BIDDERS**20A. TIME OF STARTING AND COMPLETING WORK** (Continued)**C. Single Contract - Containing Multiple Streets**

A bidder who has been awarded a single contract containing multiple streets, may be permitted to start work on such streets on dates selected by him, provided that such dates are first submitted to and approved in writing by the Engineer.

The City, however, through the Engineer, may order the starting of work on any particular street or streets on specific dates when, in the judgement of the Engineer, so doing is in the best interest of the City.

The contractor's request for approval of a selected date for start of work on a specific street shall be on forms provided by the City and shall be submitted to the Engineer at least three working days, exclusive of Saturday and Sunday, prior to the selected date.

When a selected date has been approved by the Engineer, the contractor will be expected to start work on such date and the time allowed for fully completing the work on each specific street will be computed from and include such date, unless a revised request is submitted to and approved by the Engineer. A revised request will, ordinarily, be favorably considered and approved only when the contractor's other Detroit pavement resurfacing work makes the previously selected and approved date impractical or impossible.

The time of starting and completing work on multiple street resurfacing contracts shall be predicated on:

1. Construction operations being carried on at a rate of progress to ensure completion within the stipulated time allowed for completion.
2. Construction operations being carried on without unnecessary delays and no phase of the work on other streets to be started to the prejudice of the same phase on a street previously started.
3. There being no unnecessary delay between the completion of one street and the starting of the next.
4. The work on all contracts being fully completed by not later than November 1st of the current calendar year. Carry over work, if permitted, to the following calendar year construction season shall be at no change in contract unit prices.

It is contemplated that all work will be completed during the **2015** paving season. However, if for any reason, beyond the control of the City or the Contractor, this cannot be accomplished, the schedule of operations in the **Fall of 2015** shall be such that:

1. No concrete paving slabs are poured after November 1; and
2. No excavation of any paving area shall be started for which the pouring of the concrete slab cannot be completed on or before November 1.

SPECIAL NOTICE TO BIDDERS**20A. TIME OF STARTING AND COMPLETING WORK** (Continued)**C. Single Contract - Containing Multiple Streets** (Continued)

When no further work can be done in the **Fall of 2015**, the remaining work shall, thereupon, be suspended on date stipulated in a written order of the City Engineer until suitable weather in the **Spring of 2016**.

Work shall be resumed in the **Spring of 2016** on a date ordered or approved in writing by the City Engineer and shall, thereafter, be fully completed within the number of calendar days remaining from the stipulated total of **60** days.

Whenever work is not completed within a given construction season and is scheduled to resume the following construction season(s), as described above, or whenever work cannot commence due to seasonal limitations and starting is delayed to a subsequent construction season(s), such starting delay and/or carry over to the following year(s) shall be done at no additional cost to the City of Detroit.

The unit prices or contract bid price shall remain firm and will not be changed due to the above reasons.

The Contractor shall prepare his bid taking the above detailed requirements into consideration.

20B. OTHER CONTRACTS

The work under this Contract is required to be coordinated with that of other contracts at the site. The bidder to whom this Contract is awarded shall fully cooperate with the other Contractors in such a manner as the Engineer may direct, so that the work on the entire project may be performed without delay or interference. The bidder shall take these requirements into consideration in preparing his proposal and arriving at his bid price, as no claim for additional costs or damages will be allowed for alleged interference or delay of his work by others.

21. ALLEY CLOSINGS

Prior to the temporary closing of any alley for construction purposes, the City must properly notify residents of the adjacent property, and alternate arrangements made for trash pick-up when required.

After issuance of a Start of Work Notice by the City, the Contractor shall submit for review by the City the proposed schedule of any work that would require the closing of such an alley. No construction necessitating the temporary closing of an alley shall begin without specific authorization by the City.

22. LIQUIDATED DAMAGES

The amount liquidating the damages referred to in Article 4 of the Agreement shall be assessed in accordance with Section 108.10.C entitled "Assessment of Liquidated Damages" of the 2012 MDOT Specifications for Construction

SPECIAL NOTICE TO BIDDERS**23. CONTRACT PAYMENTS**

The City will make progress and final payments in accordance with the provisions of Articles 7 and 8 of the Agreement. Progress payments will include an allowance for materials stored at the site.

Contract payments are contingent upon receipt of grant funds. The City of Detroit reserves the right to delay payments until receipt of adequate funds from the grantor agency.

24. FEDERAL REGULATIONS

The Contractor shall fully comply with all requirements of the Federal Provisions as contained in the General Conditions - Part II, and the Affirmative Action Requirements contained in the General Conditions Part III.

25. INFORMATION TO BE SUBMITTED WITH BID

The Proposal requires certain information in addition to the price bid, to be furnished by the bidder and submitted as part of his proposal. The bidder is directed to Article 8D of the Standard Instructions to Bidders for general instructions as how such information is to be submitted.

The bidder is cautioned that any information, in whatever form submitted with his bid, which in any way modifies or changes the stipulated Contract Provisions may cause the rejection of the proposal. A bid will become conditional and unacceptable should a bidder include with his proposal, either intentionally or inadvertently, standard brochures, sales agreements, etc., containing contractual provisions differing substantially from those set forth in Contract Documents, unless the bidder definitely and positively indicates that such provisions are not part of his proposal.

26. CHANGES TO STANDARD CONTRACT DOCUMENTS

The following changes are hereby made and supersede standard provisions of the Contract Documents:

A. Standard Instructions to Bidders
Article 16 - "Bond Requirements"

Delete the third paragraph of this article, and substitute therefore the following:

"The surety company or companies shall be listed in the latest issue of U. S. Treasury Form 570 and shall be licensed to do business in the State of Michigan as evidenced by a copy of the 'Certificate of Authority', issued by the Michigan State Department of Insurance filed with the Director. Should any surety upon the Contract be deemed unsatisfactory at any time to the City, notice will be given to the Contractor to that effect by the City, and the Contractor shall forthwith substitute a new surety or sureties satisfactory to the City and without any additional cost to the City."

B. General Conditions

1. Whenever Engineer is referred to, this shall be changed to read, "City Engineer, City Engineering Division - DPW".
2. Delete the second paragraph of Article 28, and substitute therefore the following:

SPECIAL NOTICE TO BIDDERS**26. CHANGES TO STANDARD CONTRACT DOCUMENTS** (Continued)

"The Contractor shall submit, with the Bid, a separate written request to the City Engineering Division - DPW for approval of each Proposed Subcontractor. Each request shall be on the forms provided by the City Engineering Division - DPW and shall give the name and address of the proposed Subcontractor, the portion and the approximate cost of the work to be sublet.

Upon request of the City Engineering Division - DPW, the Contractor who is the apparent Low Bidder shall promptly furnish such additional information tending to establish that the Proposed Subcontractor has the necessary facilities, skill, integrity, past experience, and financial resources to perform the work in accordance with the terms and conditions of this Contract."

3. "No portion of the work may be sublet without the prior written approval of the City. In no case, however, will the Contractor be permitted to sublet any concrete street or alley paving. Concrete paving for the purpose of this condition shall be defined as follows: street and alley pavements with or without curbs, separate type curbs, integral curb and sidewalk, driveways, sidewalks, sidewalk ramps, parking lot pavements and minor pavement work if approved by the Engineer."

"Subcontracting of pavement items, other than streets and alleys, may be permitted after a review of the proposed Subcontractor and the scope of work to be sublet has been made by the City Engineering Division - DPW. The Contractor shall submit the necessary Subcontractor approval request forms, insurance certificates, and such other affidavits as may be required by the contract prior to the review by the City Engineering Division - DPW. Approval of any Subcontractor shall not relieve the prime Contractor of any responsibilities, duties, and/or liabilities as defined in other sections of this Contract. The bidder is particularly reminded that the prime Contractor is required to provide a competent superintendent or general foreman at the site of the work at all times work is in progress on the Contract. Such individual shall have full authority to act for the Contractor."

"Whenever possible, subcontracts shall be let to Detroit companies. Subcontractors must agree to do their work in Detroit, and to use Detroit labor where practicable to give the kind of work specified."

"The Testing Laboratory required to test both the HMA and concrete mixes, in accordance with MDOT HMA & concrete material acceptance provision is considered a Subcontractor. Consequently, the selected laboratory shall be submitted for approval in the manner prescribed in Article 28, "Subcontracts", of the General Conditions. However, only one request for approval need to be made when the same laboratory will be used on all paving contracts awarded to the bidder. The insurance required to be carried by the laboratory shall be not less than that specified for the Contractor." All materials and workmanship shall be in accordance with the 2012 Michigan Department of Transportation (MDOT) Standard Specifications for Construction.

Article 36 - "FAIR EMPLOYMENT PRACTICES"

Delete this Article in its entirety and substitute the following:

SPECIAL NOTICE TO BIDDERS**26. CHANGES TO STANDARD CONTRACT DOCUMENTS** (Continued)**Article 36 - "FAIR EMPLOYMENT PRACTICES"** (Continued)

A. In accordance with the United States Constitution and all federal legislation and regulations governing fair employment practices and equal employment opportunity, including but not limited to Title VII of the Civil Rights Act of 1964 (P.L. 88-352, 78 STAT. 252), and the United States Department of Justice Regulations (28 C.F.R. Part 42) issued pursuant to the Title and in accordance with the Michigan Constitution and all state laws and regulations governing fair employment practices and equal employment opportunity, including but not limited to the Michigan Civil Rights Act P.A. 1976 No. 453 and the Michigan Handicappers Civil Rights Act (P.A. 1976 No. 220), the Contractor agrees that he will not discriminate against any person, employee, consultant or applicant for employment with respect to his/her hire, tenure, terms, conditions or privileges of employment or hire because of his/her religion, race, color, national origin, age, sex, height, weight, marital status, or handicap that is unrelated to the individuals ability to perform the duties of a particular job or position. The Contractor recognizes the right of the United States and the State of Michigan to seek judicial enforcement of the foregoing covenants against discrimination against itself or its subcontractors.

B. The Contractor agrees to comply with Chapter 2, Article 7, Ordinance No. 303-H as amended by Ordinance No. 330-H of the Detroit City Code, and those rules and procedures adopted by the Human Rights Department pursuant thereto.

The Contractor shall not discriminate against any employee or applicant for employment, training, education, or apprenticeship connected directly or indirectly with the performance of this Contract, with respect to his/her hire, promotion, job assignment, tenure, terms, conditions or privileges of employment because of race, color, creed, national origin, age marital status, handicap, public benefit status, sex, or sexual orientation.

The Contractor further agrees to take affirmative action to achieve reasonable representation of minority groups and women on its work force. Such affirmative action shall include, but not be limited to the following: employment, promotion, demotion or transfer, recruiting or recruitment, advertising, layoff or termination, rates of pay or other forms of compensation and selection for training or education, including apprenticeships. The Contractor shall promptly furnish any information required by the City or the Human Rights Department pursuant to this Section B.

C. In the event the Contractor fails to comply with the provisions of Section B above, or any affirmative action undertaking outlined in its proposal documents, if any, or with any rules, regulations or orders issued by the Human Rights Department, the City as the Human Rights Department may impose such contract sanctions as it may deem appropriate, including but not limited to:

1. Cancellation, termination or suspension of this Contract in whole or in part;
2. Recovering from the Contractor by set off, against the unpaid portion of the Contract price or as otherwise agreed by the parties to this Contract, liquidated damages in the amount of one-half of one percent (.005) of the Contract price not to exceed five hundred dollars (\$500.00) per day for each day of non-compliance, as determined by the Human Rights Department; and
3. Law may provide such other remedies.

SPECIAL NOTICE TO BIDDERS**26. CHANGES TO STANDARD CONTRACT DOCUMENTS** (Continued)**Article 36 - FAIR EMPLOYMENT PRACTICES** (Continued)

- D. The Contractor further agrees that he shall notify any Subcontractor of his obligations relative to non-discrimination and affirmative action under this Contract when soliciting same and shall include the provisions of this Article in any subcontract, as well as provide the City with a copy of any subcontract agreement. The Contractor further agrees to take such action with respect to any subcontract procurement as the City may direct as a means of enforcing such provisions including the aforementioned sanctions of non-compliance.
- E. Breach of the terms and conditions of this Article may be regarded as material breach of this Contract.

Also, incorporate the following Federal provisions with those normally required under the above Article. During the performance of this Contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
3. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other Contract or understanding, a notice to be provided advising the said labor union or worker's representative of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
5. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by Secretary of Housing and Urban Development and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

SPECIAL NOTICE TO BIDDERS**26. CHANGES TO STANDARD CONTRACT DOCUMENTS (Continued)****Article 36 - FAIR EMPLOYMENT PRACTICES (Continued)****General Conditions E. (Continued)**

6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government Contracts or Federally-Assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
7. The Contractor will include the portion of the sentence immediately preceding paragraph 1 and the provisions of paragraphs 1 through 7 in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each Subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction by the Secretary of Housing and Urban Development, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

F. Federal References

Whenever the term "Administrator, Housing and Home Finance Agency" occurs in the Specifications, this shall be changed to read: "Secretary of Housing and Urban Development", and the term "Housing and Home Finance Agency" shall be changed to: "Department of Housing and Urban Development".

G. City References

1. Whenever the "Environmental Protection and Maintenance Department" is referred to, this shall be changed to read, "Department of Public Works".
2. Whenever "Director" is referred to, this shall be changed to read, "City Engineer, City Engineering Division – DPW".

General Conditions: Article 40 - Contract Deductions for City of Detroit Personnel Overtime Pay.

Delete this Article in its entirety and substitute with the following:

SPECIAL NOTICE TO BIDDERS**26. CHANGES TO STANDARD CONTRACT DOCUMENTS** (Continued)**Article 36 - FAIR EMPLOYMENT PRACTICES** (Continued)

Add the following Article:

General Conditions**Article 40 - Contract Deductions for City of Detroit Personnel Overtime Pay**

Overtime shall be limited to the work days submitted on the progress schedule for the project. The workdays used to develop the progress schedule shall be Monday - Saturday and shall not include Sundays or City Holidays. Overtime work on Sundays and City Holidays shall be limited to emergency work necessary to safeguard the health and safety of the public.

The following are current City holidays: New Year's Day, Martin Luther King's Birthday, Good Friday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving, Christmas Eve, Christmas Day, New Year's Eve. The Contractor shall be responsible for confirming with the City Engineering Division, 2 Woodward Avenue, Room 601 Coleman A. Young Municipal Center, Detroit, Mi 48226 for any amendments to this list of calendar dates designated as paid holidays for City of Detroit employees.

"The unit rate per hour for the purpose of overtime pay deductions, as referred in Article 9, of the General Specifications "Hours of Work", shall be **\$30.00/per hour** for each individual employee for project inspectors, plant inspectors, and laboratory personnel assigned to this project.

The overtime pay deductions shall be calculated according to the following schedule."

In excess of eight hours per day - Monday thru Friday

Excluding Holidays	"1.5 times" unit rate per hour
Saturday	"1.5 times" unit rate per hour
Sunday and Holidays	"2.0 times" unit rate per hour

27. PRE-PERFORMANCE CONFERENCE

Before the starting notice is issued, the City Engineer will call conference for the purpose of discussing the labor standards provisions of the Contract. The conference shall be attended by the prime contractor, subcontractors, and by representatives of the City and Federal Government.

28. SUBCONTRACTS

- A. The Contractor shall not execute an agreement with any Subcontractor or permit any Subcontractor to perform any work included in this contract, until he has submitted a Non-Collusion Affidavit from the Subcontractor in substantially the form shown on the attached sheet, and has received written approval of such Subcontractor from the City.
- B. No proposed Subcontractor should be disapproved by the City without cause.

SPECIAL NOTICE TO BIDDERS**29. ACCIDENT PREVENTION**

- A. The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his fault or negligence in connection with the prosecution of the work. The safety provisions of applicable laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the City may determine to be reasonably necessary. Machinery, equipment and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction", published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws.
- B. The Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the City with reports concerning these matters.

30. SANITARY FACILITIES

The Contractor shall furnish, install and maintain ample sanitary facilities for the workmen. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and Local Government. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulation.

31. REVIEW BY CITY AND HUD

The City, its authorized representatives and agents, and the HUD Representative for the Administrator (as defined under GENERAL CONDITIONS, PART II, Page LP-1) shall, at all times, have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approvals with respect to the work will be given to the Contractor only by the City through its authorized representatives or agents.

32. WORKING AREA

The Contractor will be required to submit to the Engineer written evidence indicating that the Contractor has secured permission to use for construction purposes the property adjacent to the public right-of-way that is owned by private individuals and/or the Community Development Commission. The Community Development Commission may grant the Contractor permission to use their property providing the Contractor complies with the following conditions:

1. Prior to starting the work, the Contractor shall prepare and submit to the Engineer a drawing indicating the limits of the work area required for his operations and said area is not to exceed twenty-five (25) feet beyond the existing curb of the street. The work area shall be sufficient for storage of materials and supplies, for hauling of materials and for parking of his employees' cars.
2. The Engineer, the Contractor, and a representative of the Community Development Commission will inspect the proposed working area and will note the condition of the area with regard to grade, type, and condition of surface, and existing vegetation.

SPECIAL NOTICE TO BIDDERS**32. WORKING AREA (Continued)**

3. After receiving approval of the work area, the Contractor shall place stakes, which shall define the limits of the work area. The Contractor shall inform his employees, subcontractors, and suppliers that all operations shall be restricted to the approved work area. The Contractor shall be responsible for restricting his work force from trespassing outside the limits of the approved work area.
4. Prior to completing the Contract, the Contractor shall restore the approved work area and any additional adjoining area that has been damaged by the operations of the Contractor, the Contractor's employees, subcontractors and suppliers. The restoration shall include removal of surplus soil and/or the furnishing and placing of additional fill if required, re-grading, preparation of soil for rye seeding, if required, and the furnishing and sowing of rye seed, if required. Concrete batch plant or materials for mixing concrete for paving are not to be located on the job site.

33. AFFIRMATIVE ACTION - INFORMATION TO BIDDERS

The bidder's attention is directed to the Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246).

Failure of Contractors or subcontractors to comply with Federal Rules and Regulations regarding Equal Employment Opportunity and Affirmative Action can result in the withholding of the advance of construction money until all deficiencies have been resolved.

Failure of Contractors or subcontractors to keep proper and adequate records and to submit proper and adequate reports can result in Federal action to withhold the advance of construction money until all deficiencies have been resolved.

A. Contracts Under \$100,000

If the Contractor intends to utilize subcontractors, he shall make efforts acceptable to HUD to solicit minority subcontractors to bid and perform on this project. Assistance in this matter can be obtained from:

**Michigan Minority Business Development Council
2990 West Grand Boulevard
Detroit, Michigan 48202
313- 873-3200 313-873-4783 Fax**

B. Contracts Over \$100,000

If the Contractor intends to utilize subcontractors, he shall make efforts acceptable to HUD to solicit minority subcontractors to bid and perform on this project. Such effort may include, but not be limited to, contacts with minority contractor organizations (such contacts shall be in person) and affirmative action steps taken to accomplish minority contractor involvement (e.g. split contracts, mini-contracts, etc.). A minority contractor organization located in this area is:

**Michigan Minority Business Development Council
2990 West Grand Boulevard
Detroit, Michigan 48202
313- 873-3200 313-873-4783 Fax**

All bidders who anticipate using subcontractors on this project shall submit evidence with their bids that acceptable efforts as minority Subcontractor solicitation have been made.

SPECIAL NOTICE TO BIDDERS**34. SECTION 3 CLAUSE**

Not Used

35. AUDIT ACCESS

If applicable, the Contractor shall keep and maintain all books, records and other documents relating directly to the receipt and disbursement of the corpus and any duly authorized representative of the Secretary of the United States Department of Housing and Urban Development or Comptroller General of the United States shall, at all reasonable times, have access to and the right to inspect, copy, audit and examine all such books, records and other documents of the Contractor until three (3) years after the completion of all close-out procedures respecting the use of such funds, and until the final settlement and conclusion of all issues arising out of the use of such funds.

36. COMPLIANCE WITH CLEAN AIR AND WATER ACTS

If applicable, the Contractor agrees to comply with all applicable standards, orders or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857 (h)), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15).

The Contractor agrees to report violations to HUD and to the U.S.E.P.A. Assistant Administrator for Enforcement (EN-329). The Contractor recognizes mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (P.L. 94-163).

37. RETAINAGE REQUIREMENT STATE ACT 524 OF 1980

Notwithstanding anything contained herein to the contrary, if not in conflict with federal law or regulation, the following terms and conditions shall apply to this contract to the extent required by Act No. 524 of Public Acts of 1980 (the "Act"):

- A. As provided in the Act, the following persons are hereby designated to receive and submit, respectively, the requests for progress payments:

For the City: Engineer of Streets

- B. The following person is hereby designated as the "Architect or Professional Engineer": City Engineer, City Engineering Division - DPW

- C. The City shall retain a portion of the progress payments otherwise due to the Contractor (The "Retainage") as follows:

1. The City shall retain ten percent (10%) of the dollar value of all work in place until work is fifty percent (50%) in place;

SPECIAL NOTICE TO BIDDERS**37. RETAINAGE REQUIREMENT STATE ACT 524 OF 1980**

2. After the work is fifty percent (50%) in place, additional Retainage shall not be withheld unless the City determines that the Contractor is not making satisfactory progress, or for other specific cause relating to the Contractor's performance under this contract. If the City so determines that the Contractor is not making satisfactory progress or other specific cause relating to the Contractor's performance under his contract exists, the City may retain an additional amount of the progress payments otherwise due the contractor, which additional amount shall not exceed ten percent (10%) of the dollar value of work more than fifty percent (50%) in place. In any event, the Retainage withheld by the City pursuant to the Act shall not exceed the pro rata share of the City's matching requirements, provided, however, that if the provisions of any federal or state law or regulation provide for the retention of a different amount, the provisions of such other law or regulation shall govern.

D. All retained funds that are deposited in a regulated financial institution pursuant to the Act shall bear interest at the rate determined by the financial institution in which the retained funds are deposited.

E. Each progress payment requested shall be paid by the City to the Contractor within the following time period:

1. Thirty (30) days after the Engineer's or Architect's periodic Certified Payment Estimate; or
2. Fifteen (15) days after the City has received the funds with which to make the progress payment from a department or agency of the federal or state government, if any funds are to come from either of these sources.

In the event that the City fails to make a progress payment within the above stated period of time, and upon request by the Contractor to pay a reasonable interest charge, the reasonable interest rate payable by the City shall be six percent (6%). Interest will begin to accrue only on the thirty-first (31st) day, if payment was due according to paragraph (1) above, or on the sixteenth (16th) day if payment was due according to paragraph (2).

The actual "date of payment" of a progress payment shall be deemed to be the date on the check issued by the City for such payment.

F. If at any time during the term of this contract a dispute arises between the City and the Contractor as to whether there has been a delay for reasons that were within the control of the Contractor, or as to the period of time that such delay for reasons that were within the Control of the Contractor, or as to the period of time that such delay has been caused, continued, or aggravated by actions of the Contractor; or if at any time after ninety-four percent (94%) of work time after ninety-four percent (94%) of work under the contract is in place, a dispute between the City and the Contractor arises as to whether there has been an unacceptable delay by the Contractor in performance of the remaining six percent (6%) of work under the contract; the City and the Contractor agree to submit the foregoing disputes to the decision of an agent, at the option of the City and in accordance with provisions of the Act. The City and the Contractor shall bear equally all costs of the agent to whom a dispute is submitted for a decision, which decision shall be made by the agent pursuant to, and in accordance with, the provisions of the Act.

SPECIAL NOTICE TO BIDDERS**38. PREVAILING WAGE**

In accordance with CITY OF DETROIT ORDINANCE 01-04, the current schedule at the time of bidding of the prevailing wage and fringe benefits for all classes of construction trade workers shall be used in this contract.

The rate of wages and fringe benefits to be paid to each class of construction trade workers by the Contractor and all of his/her Subcontractors shall not be less than the wage and fringe benefits so specified.

39. SUBCONTRACTOR UTILIZATION (EXECUTIVE ORDER NO. 4)

In accordance with the City of Detroit Executive Order No. 4, this contract requires a minimum of 30% of the total contract dollar amount to be subcontracted to Detroit Based Businesses or Small Businesses.

40. PROMPT PAYMENT

The individual responsible for accepting performance under this Contract is:

Mr. Richard Doherty, P.E. City Engineer
DPW - City Engineering Division
Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 601
Detroit, Michigan 48226
313-224-3955 Telephone
313-224-3471 Fax
dohertyri@detroitmi.gov

The contact person from whom payment should be requested is:

Mr. Michel Bongo, Manager II
Finance-Central Accounting/DPW
Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 646
Detroit, Michigan 48226
313-628-2623 Telephone
313-628-2631 Fax
bongom@detroitmi.gov

41. INVOICING

Each invoice submitted requires a valid unique invoice number to facilitate the payment process. All invoices submitted shall adhere to the City's requirements for a proper invoice number and shall not contain any of the following:

- Alphabetic suffixes (e.g. 123A)
- Numeric suffixes (e.g. 123-3)
- Periods, dashes, slashes, hyphens or extraneous characters or spaces

Additionally, each invoice shall include all of the following information:

SPECIAL NOTICE TO BIDDERS**41. INVOICING (Continued)**

For: DPW-City Engineering Division (or other applicable Dept/Div)

Date of invoice

Time period of service (s) provided (if applicable)

Contractor's/Vendor's Federal ID Number

Valid Purchase Order Number (CPO/SPO number (s) and PW Number

Submit only the original invoice to:

City of Detroit, Finance-Accounts Payable Division

Coleman A. Young Municipal Center

2 Woodward Avenue, Suite 1006

Detroit, MI 48226

Submit a copy of the invoice with all supporting documentation to:

DPW-City Engineering Division

Attention: Adrienne Smith

Coleman A. Young Municipal Center

2 Woodward Avenue, Suite 601

Detroit, MI 48226

In accordance with the Prompt Payment Ordinance, departments shall notify vendors of issues with invoices to facilitate timely payment. Any invoices submitted without a proper invoice number or that do not otherwise comply with the ordinance requirements will be referred back to the department for correction.

Failure to follow this procedure or include the requested information could delay payment.

STANDARD INSTRUCTIONS TO BIDDERS

1. GENERAL PURPOSE & INTENT

These Standard Instructions to Bidders contain information and requirements, which, in general, are common to all Contract Documents prepared by the City Engineer's Office of the City of Detroit in which these instructions are included. Such instructions and requirements apply to this Contract except as such may be modified and supplemented by specific instructions and requirements pertaining to this Contract contained elsewhere in these Contract Documents.

In addition to these instructions, the Advertisement and Special Notice to Bidders also contain information to bidders.

No effort is made to emphasize any particular provision of the Contract Documents, but bidders must familiarize themselves with every provision and its effect.

2. THE CONTRACT DOCUMENTS

The Contract Documents consist of the following, grouped as listed below:

PART I

- Advertisement
- Special Notice to Bidders
- Standard Instructions to Bidders
- Proposal
- Agreement
- Bond Forms
- Contract Forms

PART II

- General Specifications
- Detailed Specifications

PART III

- Contract Drawings, if any, when so stated in the "Special Notice to Bidders"

In addition to the above, any and all Bulletins issued become a part of the Contract Documents.

A "Table of Contents," bound in the front of Part I, lists the individual parts and major subdivisions for each individual part by title, and indicates the total number of pages in each individual part. When Contract Drawings prepared by the City Engineer are included, the individual drawing titles and numbers are also here listed.

In the process of assembling and binding the Contract Documents, individual pages or drawings may have been inadvertently omitted. Each bidder shall carefully and thoroughly examine his copy of the Contract Documents for completeness, for no claim of any bidder will be allowed on the basis that his copy of the Contract Documents was incomplete.

Titles, subtitles, headings, running headings and tables of content as used throughout the Contract Documents are merely convenience and in themselves are not a Contract

provision or requirement and are not to be taken into account in any way in construing any of the rights or obligations of the parties to the Contract.

3. INTERPRETATION OF CONTRACT DOCUMENTS

Should any prospective bidder be in doubt as to the true meaning of any portion of the Contract Documents, or should he find any patent ambiguity, inconsistency, or omission thereon, he shall request the City Officer, in writing, for an official interpretation or correction. The person making the request will be held responsible for its prompt delivery.

Such interpretation or correction, as well as any additional Contract provision the City may decide to include, will be made only as a Bulletin which will be mailed or delivered to each person recorded as having received a copy of the Contract Documents. Any Bulletin issued by the City Officer shall become a part of the Contract Documents and shall be taken into account by each bidder in preparing his bid.

Only the Bulletin duly issued by the City Officer shall be binding, and prospective bidders are warned that no oral interpretation, information, or instructions by any officer or employee of the City is authorized.

4. BIDDER'S QUALIFICATION

Bids are solicited only from responsible bidders known to be skilled and regularly engaged in work of similar character and proportion to that covered by the Contract Documents.

After the opening of bids, when so requested by the City Engineer, the bidder shall promptly submit a certified written statement setting forth such information as the City may require concerning his prior experience and performance record, other work now under contract, financial condition, personnel, and qualifications of his working organization, available equipment and the major parts of the work proposed to be sublet

In addition to the above, and when so requested by the City Engineer, the bidder shall meet with the city's representatives and give further information in relation to his proposed tentative construction plan and schedule of operations and such other matters as the City may deem necessary in order to determine the bidder's qualifications, responsibility and ability to perform and complete the work in accordance with the Contract requirements

5. BIDDER'S EXAMINATIONS & INVESTIGATIONS

The prospective bidder shall carefully and thoroughly examine all parts of the Contract Documents and all maps, drawings, and other data mentioned therein as being on file in the City Engineer's Office for examination.

STANDARD INSTRUCTIONS TO BIDDERS

The bidder shall make an inspection of the site of the proposed work, as well as its adjacent area, and determine for himself all conditions under which he will be obliged to work.

The submission of a proposal shall, in itself, be conclusive evidence that the bidder has made all examinations and investigations he deemed necessary to properly prepare a proposal meeting all Contract requirements.

No plea of ignorance of conditions that may exist or that may hereafter exist, or of difficulties that may be encountered in the execution of the work under this Contract, as a result of the bidder's failure to make prudent examinations and investigations will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill in every detail all requirements of the Contract Documents, or will be accepted as a basis for a claim for extra compensation, damages, or for an extension of the time of completion.

6. LABOR & MATERIALS

The City of Detroit will not furnish any labor, materials or supplies unless specifically provided for in the Contract.

A. Materials: All materials and equipment incorporated in the work of this Contract shall be new. No secondhand or salvaged materials or equipment will be permitted unless specifically specified.

B. Availability of Materials: The specified time of completion is based upon the availability of the required materials. It will be assumed by the City that each bidder will have made his own investigation and determination of the probable availability of the required materials in the amounts and at the times necessary to complete the work within the time allowed for completion.

If, during construction, certain materials cannot be obtained in the quantities and/or at time necessary to complete the work within the time allowed, then an extension of time of completion will be considered in accordance with the provisions of Article 18, "Delays and Extension of Time," of the General Conditions provided:

- 1) The materials which in the judgment of the Engineer were properly determined to be available at time of bidding, become unavailable during construction;
- 2) Diligent efforts have been made by the Contractor to secure the materials;
- 3) The Engineer has been notified sufficiently in advance so that available substitutions could have been considered.
- 4)

Delay in securing any specific materials shall not be used as the basis for delaying the construction of other parts of the work not dependent upon such delayed materials.

7. BASIS OF BID - PRICE REQUIRED

The Special Notice to Bidders designates the basis on which the price or prices are required. Such price or prices are to be submitted in accordance with the following provisions such as are applicable to the basis designated for this Contract.

In arriving at the price or prices bid, the bidder shall make his own estimates of the facilities and difficulties attending the performance of the proposed Contract, including local conditions, availability of materials, uncertainty of weather, and all other contingencies. It is the intent of the Contract Documents to provide for finished work and any miscellaneous items clearly necessary to this end shall be considered a Contract requirement whether or not specifically included in the Contract Documents.

A. Single Lump Sum Price: When proposals are invited on the basis of a lump sum price for the entire work included in the Contract, then only a single lump sum price shall be submitted.

B. Lump Sum Price for All or Parts of the Work: When proposals are invited on the basis of a lump sum price for the entire work included in the Contract with the option for separate bids on designated parts of the work, the bidder may submit a lump sum price for the entire work and or separate lump sum prices for such of the designated parts he is qualified to perform.

C. Lump Sum Prices for Designated Parts of the Work: When proposals are invited on the basis of separate lump sum prices designated for parts of related work with no provision for a single lump sum price for the entire work, the bidder may submit a lump sum price for each of the designated parts he is qualified to perform. No price shall be submitted for doing the entire work, or combination of parts thereof, as a single contract.

D. Lump Sum Price - Two or More Independent Contracts: When the Proposal is common to two or more Contracts for work which is distinctly separated but of the same general type, the bidder may submit a lump sum price for such Contracts as he selects, with the Proposal for each Contract to be considered independently. Unless the Proposal otherwise provides, it will be understood that the bidder considers himself qualified to perform concurrently each of the Contracts for which he submits a price and to perform each in accordance with its own specific Contract requirements.

When the Proposal so provides, a bidder, whose capacity for doing concurrent work prevents him from accepting all the contracts on which he may desire to submit proposals, may submit a lump sum price on such contracts as he selects with the understanding that he would be awarded only the total number of contracts which he stipulates in the Proposal that he has the capacity to accept and perform concurrently. However, the bidder shall not designate

STANDARD INSTRUCTIONS TO BIDDERS

which he submits a price and to perform each in accordance with its own specific Contract requirements.

When the Proposal so provides, a bidder, whose capacity for doing concurrent work prevents him from accepting all the contracts on which he may desire to submit proposals, may submit a lump sum price on such contracts as he selects with the understanding that he would be awarded only the total number of contracts which he stipulates in the Proposal that he has the capacity to accept and perform concurrently. However, the bidder shall not designate which particular contract or contracts he would accept in event he is the low bidder on more contracts than he has the capacity to perform concurrently. The determination of on what contract or contracts a bidder is considered to have submitted the actual low bid or bids will be made by the City on the basis of the bids which will result in the entire work of all contracts being done for the least cost to the City.

When the Proposal so provides, and not otherwise, the bidder may submit a lump sum price for doing as a single contract all the work of the individual contracts in such combination as listed in the Proposal.

E. Unit Price: When Proposals are invited on the basis of unit prices for various items, the bidder shall state a unit price for each and every item listed in the Proposal form, and such prices shall be extended and totaled. If, during the review of the Proposals, the City finds any errors in any extension or total, the City will make the necessary corrections and award the Contract on the basis of such corrections, since the unit prices shall govern.

Any proposal which does not contain a unit price for each item listed will be deemed incomplete and will not be considered in the award of the Contract.

Any work not specifically mentioned in the payment items listed in the Proposal shall be considered incidental to one or more of the payment items, and no claim for additional compensation will be allowed. The bidder shall not add to the listed items, or combine any of the items.

The quantities for the various items of work appearing in the Proposal, while stated with as much accuracy as possible in advance, are approximate only and given solely to provide a uniform basis for comparing bids and determining the amounts of the bonds. The actual quantities required to complete the work and for which payment will be made, may be more or less than those stated in the Proposal, and, if so, no claim for damages or loss of profits will be allowed.

The unit price for each of the several items in the Proposal shall include its pro rata part of overhead and be such that the whole of the unit prices will represent a balanced bid. Any proposal in which the unit prices bid for any of the several items are deemed by the City to be manifestly unbalanced may be rejected by the City and not considered in the award of the Contract and may cause the entire bid

to be rejected.

8. PREPARATION OF PROPOSALS

Proposals shall be carefully prepared in strict accordance with the Contract requirements and these instructions, otherwise the bid may be rejected and not considered in the award of the Contract.

A. Form: The blank form of Proposal supplied by the City shall be used. The form shall not be detached, but shall be submitted intact as originally bound. No change shall be made in the wording of the form or in any of the items mentioned therein, nor shall any special conditions be made or included as part of the bidder's proposal. Proposals shall be filled out legibly in ink. Erasures or other changes in the bid shall be explained or noted over the signature of the bidder.

B. State of Prices: The price or prices bid shall be stated in figures only and in the proper space or spaces provided in the Proposal form.

C. Evaluated Bid: When the Proposal provides for evaluated bids, full information shall be supplied and computations shall be made by the bidder in accordance with the manner and method provided for in the Proposal. If, during the review of the Proposals, the City finds any errors in the bidder's computation, the City reserves the right to make the necessary corrections, including the changing of any values used in the computation found to be a variance with basic information or data furnished by the bidder. When information is required to supplement the statements made by the bidder, it shall be furnished in accordance with the next following section.

D. Information Required: When the Special Notice to Bidders or the Proposal form so requires, certain information, in addition to the price bid, shall be furnished as part of the bidder's proposal. Failure of the bidder to submit the required information or the submission of the information in an inaccurate or incomplete form may be cause for rejection of the entire Proposal.

1) **Bidder's Drawings and Specifications:** When bidder's drawings and/or specifications are required to be submitted, they shall be in sufficient detail to fully and distinctly show and describe the equipment which the bidder proposes to furnish, including the kind and quality of the material and workmanship that will be used in the various parts. If any general drawings, specifications, catalogs, or other literature are submitted which contain information or data not pertaining to the particular equipment proposed to be furnished, appropriate notations to that effect must be made.

STANDARD INSTRUCTIONS TO BIDDERS

- 2) Other Information: When the Proposal form provides space for inserting required information, such space is to be used. If the bidder finds such space insufficient, then the required information may be submitted on separate sheets properly identified as part of the bidder's proposal.
- 3) Supplemental Information: The bidder may submit such supplemental information, as he may desire, describing the equipment he proposes to furnish. However, the bidder is to completely fill out the Proposal form even though some of the information required to be stated in the Proposal may be contained in the supplemental information furnished.

E. Conditional Bids: Any stipulation or qualification contrary to the Contract requirements made by the bidder in or accompanying his proposal as a condition for the acceptance of the Contract will not be considered in the award of the Contract and may cause the rejection of the entire Proposal.

F. Waiver: The bidder's attention is called to the paragraph in the Proposal headed "Waiver." This is included for the purpose of avoiding any controversy over the claim of any bidder of the right to refuse to execute the Contract and demand the return of his bid deposit on the grounds of error, mistakes, or omissions made by him in his Proposal.

G. Name, Legal Status, and Bidder's Signature: Each bid shall contain, on page P. 4 of the Proposal form, the following information inserted in the respective places provided therefore:

- 1) Full business name of bidder together with Federal Treasury number.
- 2) Business address.
- 3) Signature of bidder. The person signing the Proposal shall use his usual signature, followed by his name legibly printed on the line next below.
- 4) Date of proposal.

The following are additional requirements, according to the bidder's legal status:

Individual

- 1) Legal status - place "X" in box for "Individual."
- 2) Home address and Social Security number

A bid by a person who adds to his signature the word "President," "Partner," "Agent," or other designation, without disclosing his principal, may be held to be the bid of the individual signing.

Doing Business Under An Assumed Name

- 1) Legal status - place "X" in box for "Doing business under an assumed name" together with Federal Treasury number.
- 2) County in Michigan in which assumed name is registered.
- 3) Home address of individual and Social Security number.

Co-Partnership

- 1) Legal status - place "X" in box for "Co-partnership."
- 2) County in Michigan in which co-partnership is registered.
- 3) Names and home address of all partners, together with Social Security numbers.
- 4) Signature of one of the partners, followed by the word "Partner" on the line "Title."

Corporation

- 1) Legal status - place "X" in box for "Corporation."
- 2) Name of state under whose laws the corporation is incorporated.
- 3) If not a Michigan corporation - indicate by "X" in appropriate box if the corporation is licensed to do business in Michigan. An out-of-state corporation will be required to have such license at the time the Contract is executed.
- 4) Full names, titles, and home addresses of corporation officers, and Social Security numbers.
- 5) Signature of authorized officer of corporation, followed by his title.
- 6) Corporate seal affixed.
- 7) "Certificate" for signature and seal - page P. 5 of Proposal - shall be executed by an officer other than the one signing the Proposal.

Agent

If the bid is signed by an individual acting as an agent for the principal in whose name the Proposal is submitted, the addition to the above applicable requirements, there shall be attached to the Proposal a power-of-attorney evidencing authority of the individual to sign and submit the bid in the name of the designated principal.

STANDARD INSTRUCTIONS TO BIDDERS

9. BID DEPOSIT When the Advertisement states that the security is required with the Proposal to insure the acceptance and execution of the Contract and Bonds, no bid will be considered complete unless so guaranteed.

A. Amount: The amount of the bid deposit shall be not less than that stipulated in the Advertisement. In case the Proposal contains alternates, the amount of the bid security, if stated as a percentage of the bid, refers to the Base Bid. If the Proposal contains two or more Contracts, the amount of the bid security required is determined on the total amount of the bids for such Contracts for which bids are submitted.

B. Form: The bidder, at his option, may furnish either a certified check, bank draft, irrevocable bank letter of credit, or guaranty (bidder's) bond. If the bid deposit covers two or more contracts contained in the same Proposal form, one check, draft, irrevocable bank letter of credit, or guaranty bond may be used if properly identified to cover all contracts for which a bid is submitted. Cash deposits will not be accepted.

Check: The certified check or bank draft shall be drawn on a solvent bank and made payable without condition to the "Detroit Building Authority."

Irrevocable Bank Letter of Credit: The irrevocable bank letter of credit shall be drawn on a solvent bank and made payable to "Treasurer, City of Detroit." The Irrevocable Bank Letter of Credit shall be given in compliance with and subject to the provisions and term of the Uniform Commercial Code which was adopted in Michigan in 1962 in Public Act 174. (Authorized by Common Council Resolution September 2, 1969, JCC 2208.) The Irrevocable Bank Letter of Credit must be submitted on a form acceptable to the City of Detroit.

Bond: The guaranty (bidder's) bond shall be on the form supplied by the City. The bond shall be executed by a surety company licensed to do business by the State of Michigan, and in accordance with the instructions contained on the bond form.

C. Submission: The bid deposit, in whichever form, shall be enclosed in the same envelope as that containing the bid and is not to be submitted separately.

D. Return: The bid deposit of all bidders may be held by the City until all bids have been canvassed and the award of the Contract recommended to and approved by the City Council.

The bid deposit of the bidder awarded the Contract will be held until the Contract is duly executed and confirmed. The bid deposits of other than the successful bidder will be returned after the award has been made by the City Council.

E. Forfeiture: If the bidder to whom the contract is awarded, refuses or neglects to properly execute the Contract, or fails to furnish the required surety bonds, within 10 calendar days after written notice to him, the amount of the deposit shall be forfeited, and retained by the City of Detroit as liquidated damages.

10. SUBMITTING BID

A. Form: The Bid Documents containing the Proposal, together with the required bid deposit, shall be securely sealed in a suitable envelope clearly labeled as a bid identified by the Contract number stated in the Advertisement, and showing the bidder's name, so as to guard against premature opening.

B. Place and Time: Bids will be received during the regular business hours at the place and up to the time stated in the Advertisement, or up to the time as extended by Bulletin. Bids may be delivered in person or mailed, but delivery is the bidders' entire responsibility. Any bid received after the stated hour, even through the mail, will be returned unopened to the bidder.

C. Withdrawal: Bids received prior to the scheduled time for receipt of bids will be kept securely, unopened. No bid after being received by the City will be returned to a bidder prior to the opening of bids. After the opening and reading of the bids, no bid may be withdrawn before the expiration of the number of days specified in the Advertisement, and then only in writing and in advance of the actual award. Negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid before or after it has been opened.

D. Modifications: No bid after being submitted may be modified or changed by letter, telegram, or other means, and if any such modification is received by the City, it will not be considered in the award of the Contract. No bidder will be permitted to submit more than one bid.

11. OPENING OF BIDS All bids received will be publicly opened for identification, but not read promptly after the designated time at the place stated in the Advertisement or as extended by Bulletin, and bidders are invited to be present.

12. COMPARISON OF BIDS

A. Lump Sum Bids: Bids on lump sum contracts will be compared on the basis of the lump sum price bid, adjusted for alternate prices bid if any are called for in the Proposal.

B. Unit Price Bids: Bids on unit price contracts will be compared on the basis of a total estimated price, arrived at by taking the estimated quantities of each item stated in the Proposal, multiplied by the corresponding unit prices bid, and including any lump sum bids on individual items. Any

STANDARD INSTRUCTIONS TO BIDDERS

errors found in the bidder's extensions or addition will be corrected, since the individual unit prices govern, and the total estimated price will be adjusted accordingly.

C. Evaluated Bids: Bids on an evaluated basis will be compared on the basis of the net evaluated bid price. Any errors found in the bidder's computation will be corrected and the net evaluated bid price adjusted accordingly. The Contract, if awarded, will be awarded at the bid price to the responsible bidder having the lowest net evaluated bid price.

13. REJECTION OF BIDS

The City of Detroit reserves the right to reject any and all bids or to waive any irregularity in any bid should be deemed for its best interest so to do. Without being limited thereto, a bid may be rejected if:

- A. The Proposal does not strictly conform to the requirements of the Contract Documents or law;
- B. The Proposal contains unit prices which, in the judgment of the Engineer, are unbalanced;
- C. The Proposal is conditional;
- D. The bidder misstates or conceals any material fact in the bid;
- E. The bidder fails or refuses to promptly furnish the City information requested as to his qualifications and responsibility;
- F. A determination is made by the City that the bidder is not qualified or responsible to perform the work.

14. AWARD OF CONTRACT

The Contract will be awarded to the lowest responsible bidder complying with the requirements of the Contract Documents, provided his bid is reasonable and the best interest of the City of Detroit will be served by accepting it. The Contractor will not be subdivided among two or more bidders unless the Proposal provides for separate bids on designated parts of the work, and then only when the total of the lowest reasonable bids for the individual parts is less than the lowest responsible bid for the entire work when a combined bid is permitted.

The Contractor will be deemed to be awarded after the formal approval of the Common Council of the City of Detroit has been obtained, and written notice by the City has been sent to the intended awardee. The Contract will not, however, be valid or binding upon the City until the Contract Agreement has been duly executed by both parties, the required Surety Bonds furnished, and the executed Contract Documents have been endorsed and confirmed in accordance with the City of Detroit Charter.

15. CONTRACT EXECUTION

The bidder to whom the Contract is awarded, shall within 10 calendar days after the Contract forms are presented to him, enter into written contract with the City by properly executing the Agreement and furnishing the required Performance Bond and Payment Bond and other information and affidavits as are required by and in strict accordance with the City's instructions accompanying the Contract forms.

Any delay by the successful bidder beyond the ten calendar days stipulated for submitting to the City Engineer in complete and acceptable form and number, the Agreement, Bonds, and other required information and affidavits, will cause a like number of calendar days being deducted from the total time stipulated for fully completing the work.

This provision in no way affects the rights of the City to require forfeiture of the bid deposit as provided for in Article 9E.

16. BOND REQUIREMENTS

The successful bidder to whom the Contract is awarded shall furnish at his own expense and at the time he submits his executed copies of the Contract, surety company bonds, on forms furnished by the City, conforming to the applicable statutes of the State of Michigan in effect at the time of the date of the bonds, as follows:

- A. *Performance Bond*, to insure construction and completion of the entire work according to the requirements of the Contract and within the time allowed.
- B. *Payment Bond*, for the protection of claimants supplying labor and materials to the principal contractor or his sub-contractors in the prosecution of the work.

Each bond shall run to the City of Detroit, Michigan, and each bond shall be in the full amount of the Contract price unless otherwise specified in the Special Notice to Bidders.

The surety company or companies shall be listed in the latest issue of U.S. Treasury Form 570, and shall be licensed to do business in the State of Michigan as evidenced by a copy of the "Certificate of Authority" issued by the Michigan State Department of Insurance filed with the Director. Should any surety upon the Contract be deemed unsatisfactory at any time to the City, notice will be given to the Contractor to that effect by the City, and the Contractor shall forthwith substitute a new surety or sureties satisfactory to the City and without any additional cost to the City.

STANDARD INSTRUCTIONS TO BIDDERS

An executed copy of each bond will be required for each copy of the executed Contract. The date of the bonds shall be the same as the date of the Contract.

17. ASSIGNMENT OF CONTRACT

Bidder's attention is directed to Article 29 of the General Conditions, "Assignment." The City will not consider the assignment or transfer of the Contract unless an exigency occurs which was not known or could not have been foreseen by the bidder at the time of bidding. No assignment or transfer will be approved which is not in the best interest of the City.

18. SUBCONTRACTS

The bidder's attention is directed to Article 28 of the General Conditions, "Subcontracts." No portion of the work may be sublet without the prior written approval of the City. Bids shall be based on letting subcontracts, whenever possible, to Detroit companies. Subcontractors must agree to do their work in Detroit and to use Detroit labor where practicable to give the kind of work specified.

When the Proposal so provides, the bidder shall name the persons or firms he proposes to use as subcontractors for such parts of the work specifically listed in the Proposal. All persons or firms so named shall be acceptable to the City of Detroit and if any are not acceptable, the bidder will be required to name other persons or firms which are acceptable. Any such required substitutions will in no way otherwise change or modify the bidder's Proposal. After the award of the Contract, no substitutions will be allowed except for reasons deemed justified by and in the best interest of the City.

PW-6972

P. 1

PROPOSAL

**TO : CITY OF DETROIT
FINANCE DEPARTMENT
PURCHASING DIVISION
DETROIT, MICHIGAN 48226**

**PROJECT: PW-6972 HMA RESURFACING AND MISCELLANEOUS CONSTRUCTION ON W. GRAND BLVD
BETWEEN WOODWARD & LINWOOD, W. VERNOR BETWEEN MICHIGAN & 17TH, W.
VERNOR BETWEEN FISHER FREEWAY & LIVERNOIS AND W. VERNOR BETWEEN DIX &
CENTRAL**

PART I - BASE BID

I. PRICE BID

The undersigned hereby proposes to furnish all materials and supplies and to provide all labor, construction tools and equipment and to perform and fully complete all the work required for the construction of the above described project for which unit prices are hereinafter submitted.

The undersigned agrees that any incidental work required to perform the complete scope of work and not specifically mentioned in the payment items shall be considered as incidental to the payment items and that no claim for additional compensation will be made.

The undersigned understands that the quantities stated in the Unit Price Schedule are approximate only and are subject to increase or decrease and the undersigned hereby agrees to perform all quantities of work as either increased or decreased in accordance with the requirements of the contract documents at the unit prices bid in the Unit Price Schedule.

PW-6972

**HMA RESURFACING & MISC. CONSTRUCTION ON
W. GRAND BLVD BETWEEN WOODWARD & LINWOOD,
W. VERNOR BETWEEN MICHIGAN & 17TH,
W. VERNOR BETWEEN FISHER FREEWAY & LIVERNOIS
AND W. VERNOR BETWEEN DIX & CENTRAL**

EXHIBIT A**Project Completion: 60 Days**

ITEM NO.	DESCRIPTION OF ITEM	QTY.	PAY UNIT	UNIT PRICE	ITEM TOTAL
1	1500001 Mobilization, Max. ____	1	LS	\$ 210,000.00	\$ 210,000.00
2	2040050 Pavt, Rem	163	Syd	\$ 25.00	\$ 4,075.00
3	2040055 Sidewalk, Rem	5,493	Syd	\$ 31.50	\$ 173,029.50
4	2047001 _ Curb, Rem, Modified	5,084	Ft	\$ 33.00	\$ 167,772.00
5	2047001 _ Integral Curb and Sidewalk, 2 Feet, Rem, Modified	1,282	Ft	\$ 20.00	\$ 25,640.00
6	2050023 Granular Material, CI II	60	Cyd	\$ 1.00	\$ 60.00
7	2057021 _ Excavation, Earth, Modified	80	Cyd	\$ 1.00	\$ 80.00
8	3020010 Aggregate Base, 4 inch	46	Syd	\$ 1.00	\$ 46.00
9	4037001 _ Sewer Cleanout, Modified	1,970	Ft	\$ 2.00	\$ 3,940.00
10	4037030 _ Dr Structure Cover, Modified	117,849	Lb	\$ 1.00	\$ 117,849.00
11	4037050 _ Catch Basin A, Modified	4	Each	\$ 200.00	\$ 800.00
12	4037050 _ Catch Basin BT, Modified	4	Each	\$ 200.00	\$ 800.00
13	4037050 _ Dr Structure Cleaning, Modified	197	Each	\$ 100.00	\$ 19,700.00
14	4037050 _ Dr Structure Cover, Adj, Case 1, Modified	449	Each	\$ 400.00	\$ 179,600.00
15	4037050 _ Dr Structure Cover, Adj, Case 2, Modified	15	Each	\$ 500.00	\$ 7,500.00
16	4037050 _ Reconstruct Dr Structure, Case 1, Modified	25	Each	\$ 700.00	\$ 17,500.00
17	5010001 Pavt, Cleaning	1	LS	\$ 45,820.00	\$ 45,820.00
18	5010005 HMA Surface, Rem	9,308	Syd	\$ 2.34	\$ 21,780.72
19	5010008 Pavt for Butt Joints, Rem	4,036	Syd	\$ 2.34	\$ 9,444.24
20	5010025 Hand Patching	20	Ton	\$ 1.00	\$ 20.00
SUBTOTAL P. 1a, ITEMS 1-20					\$ 1,005,456.46
NAME OF CONTRACTOR: Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., Joint Venture/FWC-45-0514373/Ajax 38-1383205 patty@fortwaynecontracting.com					

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P. 1b

EXHIBIT A

ITEM NO.	DESCRIPTION OF ITEM	QTY.	PAY UNIT	UNIT PRICE	ITEM TOTAL
21	5010051 HMA, 4E3	14,653	Ton	\$ 60.00	\$879,180.00
22	5010057 HMA, 5E3	10,989	Ton	\$ 62.00	\$681,318.00
23	5017011 _Cold Milling HMA Surface, Modified	133,207	Syd.	\$ 2.34	\$311,704.38
24	5017031 _Conditioning Existing Pavement, Modified	1,795	Ton	\$ 1.00	\$1,795.00
25	5017031 _HMA Approach, Modified	1,792	Ton	\$ 80.00	\$143,360.00
26	5017031 _HMA Shoulder, Modified	94	Ton	\$ 250.00	\$23,500.00
27	6027011 _Conc Pavt, Misc, Nonreinf, 8 inch, Modified	163	Syd.	\$ 25.00	\$4,075.00
28	6027011 _Pavt Repr, Nonreinf Conc, 10 inch, Modified	46	Syd.	\$ 50.00	\$2,300.00
29	6030005 Cement	8	Ton	\$ 1.00	\$8.00
30	6037001 _Curb, Conc, Detail CD, Modified	6,788	Ft	\$ 0.10	\$678.80
31	6027011 _Pavt Repr, Rem, Modified	46	Syd.	\$ 20.00	\$920.00
32	8027001 _Detectable Warning Surface Tile, Modified	571	Ft	\$ 60.00	\$34,260.00
33	8027010 _Sidewalk Ramp, ADA, Modified	20,808	Sft	\$ 3.50	\$72,828.00
34	8027010 _Sidewalk, Conc, 4 inch, Modified	27,586	Sft	\$ 3.50	\$96,551.00
35	8027010 _Sidewalk, Conc, 6 inch, Modified	252	Sft	\$ 3.50	\$882.00
36	8037001 _Integral Curb and Sidewalk, 2 Feet, Modified	1,282	Sft	\$ 20.00	\$25,640.00
37	8027010 _Sidewalk, Conc with Tree Roots, 4 inch, Modified	684	Sft	\$ 0.01	\$6.84
38	8027010 _Sidewalk, Conc with Tree Roots, 6 inch, Modified	108	Sft	\$ 0.01	\$1.08
39	8110024 Pavt Mrkg, Ovly Cold Plastic, 6 inch, Crosswalk	5,216	Ft	\$ 2.25	\$11,736.00
40	8110041 Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk	1,020	Ft	\$ 5.95	\$6,069.00
41	8110044 Pavt Mrkg, Ovly Cold Plastic, 18 inch, Stop Bar	1,261	Ft	\$ 8.25	\$10,403.25
42	8110063 Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	21	Each	\$ 145.00	\$3,045.00
SUBTOTAL P. 1b, ITEMS 21-42					\$2,310,261.35
NAME OF CONTRACTOR: Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., Joint Venture/FWC-45-0514373/Ajax 38-1383205 patty@fortwaynecontracting.com					

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P. 1c

EXHIBIT A

ITEM NO.	DESCRIPTION OF ITEM	QTY.	PAY UNIT	UNIT PRICE	ITEM TOTAL
43	8110068 Pavt Mrkg, Ovly Cold Plastic, Only	31	Each	\$ 155.00	\$4,805.00
44	8110071 Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	8	Each	\$ 145.00	\$1,160.00
45	8110078 Pavt Mrkg, Ovly Cold Plastic, Thru Arrow Sym	2	Each	\$ 135.00	\$270.00
46	8110153 Pavt Mrkg, Sprayable Thermopl, 4 inch, White	22,688	Ft	\$ 0.39	\$8,848.32
47	8110154 Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow	24,177	Ft	\$ 0.39	\$9,429.03
48	8110155 Pavt Mrkg, Sprayable Thermopl, 6 inch, White	16,335	Ft	\$ 0.45	\$7,350.75
49	8110155 Pavt Mrkg, Thermopl, 6 inch, Crosswalk	3,093	Ft	\$ 2.15	\$6,649.95
50	8117001 Pavt Mrkg, Thermopl, 12 inch, Crosswalk	930	Ft	\$ 4.95	\$4,603.50
51	8110533 Pavt Mrkg, Modified Urethane, 6 inch, Cross Hatching White	1,104	Ft	\$ 2.75	\$3,036.00
52	8110535 Pavt Mrkg, Modified Urethane, 6 inch, Cross Hatching Yellow	819	Ft	\$ 2.75	\$2,252.25
53	8117001 _ Pavt Mrkg, Thermopl, 18 inch, Stop Bar	945	Ft	\$ 8.25	\$7,796.25
54	8117001 _Recessing Pav't Mrkg, 12 inch	1,950	Ft	\$ 2.95	\$5,752.50
55	8117001 _Recessing Pav't Mrkg, 18 inch	2,206	Ft	\$ 3.05	\$6,728.30
56	8117001 _Recessing Pav't Mrkg, 6 inch	8,309	Ft	\$ 2.05	\$17,033.45
57	8117050 _ Pavt Mrkg, Waterborne, Bike Sharrow Sym, White	43	Each	\$ 85.00	\$3,655.00
58	8117050 _ Pavt Mrkg, Waterborne, Bike Symbol and Arrow, White	63	Each	\$ 75.00	\$4,725.00
59	8120012 Barricade, Type III, High Intensity, Double Sided, Lighted Furn	16	Each	\$ 69.95	\$1,119.20
60	8120013 Barricade, Type III, High Intensity, Double Sided, Lighted Oper	16	Each	\$ 0.01	\$0.16
61	8120140 Lighted Arrow, Type C, Furn	8	Each	\$ 395.00	\$3,160.00
62	8120141 Lighted Arrow, Type C, Oper	8	Each	\$ 0.01	\$0.08
63	8120170 Minor Traf Devices	1	LS	\$ 238,930.00	\$238,930.00
64	8120250 Plastic Drum, High Intensity, Furn	386	Each	\$ 14.95	\$5,770.70
65	8120251 Plastic Drum, High Intensity, Oper	386	Each	\$ 0.01	\$3.86
SUBTOTAL P. 1c, ITEMS 43-65					\$343,079.30
NAME OF CONTRACTOR: Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., Joint Venture/FWC-45-0514373/Ajax 38-1383205 patty@fortwaynecontracting.com					

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P. 1d

EXHIBIT A

ITEM NO.	DESCRIPTION OF ITEM	QTY.	PAY UNIT	UNIT PRICE	ITEM TOTAL
66	8120350 Sign, Type B, Temp, Prismatic, Furn	1,600	Sft	\$ 3.95	\$6,320.00
67	8120351 Sign, Type B, Temp, Prismatic, Oper	1,600	Sft	\$ 0.01	\$16.00
68	8120370 Traf Regulator Control	1	LS	\$ 184,612.00	\$184,612.00
69	8160090 Water, Sodding/Seeding	2	Unit	\$ 1.00	\$2.00
70	8167011 _ Hydroseeding, Modified	1,381	Syd	\$ 0.01	\$13.81
71	8167021 Topsoil Surface, Furn, LM, Modified	115	Cyd	\$ 50.00	\$5,750.00
72	8237050 _ Water Shutoff, Adj, Modified	37	Each	\$ 350.00	\$12,950.00
SUBTOTAL P. 1c, ITEMS 66-72					\$209,663.81
GRAND TOTAL P.1a + P.1b + P.1c + P.1d, ITEMS 1-72					\$3,868,460.92
NAME OF CONTRACTOR: Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., Joint Venture/FWC-45-0514373/Ajax 38-1383205 patty@fortwaynecontracting.com					

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P. 2

PROPOSAL
PART II CONDITIONS

II. 1 BID DEPOSIT

A bid deposit accompanies this Proposal in the form checked below:

- ☒ Bid Bond by Surety Company
- ☐ Certified Check or Bank Draft
- ☐ Irrevocable Bank Letter of Credit

Such deposit is in an amount not less than called for in the Advertisement, and is given as a guarantee of the good faith of the Undersigned and that the Undersigned will enter into written contract as provided, if successful in securing the award thereof; and it is hereby agreed that if at any time other than as provided in the Contract requirements and conditions, the Undersigned should withdraw this Proposal, or if this Proposal is accepted and should there be a failure on the part of the Undersigned to execute the Contract and furnish satisfactory Bonds within 10 days after the date of notification of the acceptance of this Proposal, in either of such events, the bid deposit shall be forfeited to the City of Detroit as liquidated damages, and not as a penalty; otherwise the bid deposited shall be returned to the Undersigned upon confirmation of the Contract.

II. 2 BIDDER'S EXAMINATIONS AND UNDERSTANDING

The Undersigned certifies that the Contract Documents listed in the Standard Instructions to Bidders, together with any and all Bulletins issued, have been carefully examined, and the site of the work has been inspected. The Undersigned declares that the amount and nature of the work is understood, and that at no time will misunderstanding of the Contract Documents be pleaded.

II. 3 BIDDER'S QUALIFICATIONS

The Undersigned declares that he has had prior experience in the type of work required by the Contract Documents and that he has the necessary finances, personnel and working organization, and equipment available to execute the proposed work in accordance with the requirements of the Contract Documents. The Undersigned further declares that he is prepared to and will promptly furnish a certified written statement regarding his qualifications, including finances, upon request of and on the forms provided by the City Engineer.

II. 4 STARTING AND COMPLETING WORK

The Undersigned declares that if awarded the Contract, he is prepared to and will start the work and complete the entire project in accordance with the provisions set forth under "Time of Starting and Completing Work" in the Special Notice to Bidders.

II. 5 BID NON-COLLUSIVE

The Undersigned certifies that this Proposal is fair and genuine, and not collusive or sham, and that he has not in any manner, directly or indirectly agreed or colluded with any other person, firm, or association to submit a sham bid or to refrain from bidding, or in any way to fix the amount of this Proposal or that of any other bidder, or to secure any advantage against the City of Detroit.

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P. 3

PROPOSAL

The Undersigned further certifies that no officer or employee of the City of Detroit is personally or financially interested, directly or indirectly, in this Proposal, or in any contract which may be made under it, or in the purchase or sale of any materials or supplies for the work to which it relates, or any portion of any expected profits thereto.

II. 6 BIDDER NOT IN ARREARS

The Undersigned certifies that, as of the date of this Proposal, he is not in arrears to the City of Detroit for debt or contract or is in any way a defaulter as provided for in Sec. 21-3-15, City Code (Ordinance No. 52H).

II. 7 WAIVER

The Undersigned certifies the price bid in this Proposal is correct and complete and stated as intended by the Undersigned for work covered by this Proposal, and, further, that all information given in or furnished with this Proposal is correct, complete, and submitted as intended by the Undersigned, and the Undersigned does hereby waive any right or claim he may now have or which may hereafter accrue to him, by reason of errors, mistakes, or omissions made by the Undersigned in this Proposal, to refuse to execute the Contract if awarded to him, or to demand the return of the Bid deposit, or to be relieved from any of his obligations as set forth in said Bid Deposit required with this Proposal.

II. 8 REJECTION OF BIDS

The Undersigned understands that the City of Detroit reserves the right to waive any irregularity in any bid, or to reject any or all bids.

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PROPOSAL**PART III NAME, ADDRESS, LEGAL STATUS, AND SIGNATURE OF BIDDER**

This Proposal is submitted in the name of:

**Fort Wayne Contracting, Inc/Ajax Paving Industries, Inc.,
Joint Venture****FWC:45-0514373/Ajax: 38-1383205**

Federal ID Number

(Print full legal name)

The Undersigned hereby designates below his business address to which all notices, directions, or other communications may be served or mailed:

Street: 320 E. Seven Mile Rd.City: Detroit Zip Code: 48203 State: M1Telephone No: 313-368-3400 Fax No: 313-368-3406Contact Name & Title: Patty Hopkins – ControllerE-Mail Address: patty@fortwaynecontracting.com

The Undersigned hereby declares that he had the legal status checked below:

☐ **INDIVIDUAL**☐ **DOING BUSINESS UNDER AN ASSUMED NAME**, which is registered with the County of Clerk of the County of _____, Michigan☐ **CO-PARTNERSHIP**, which is registered with the County Clerk of the County of _____, Michigan☒ **CORPORATION**, incorporated under the laws of the State of _____
(If other than Michigan Corp.)Now licensed to do business in Michigan ☐ YES☐ NO☒ Certificate on P. 5 has been executed as evidence the person signing has the authority to commit the corporation to this Proposal

The names, titles and home addresses of all persons directly interested in this Proposal are as follows:

NAME AND TITLE**HOME ADDRESS**

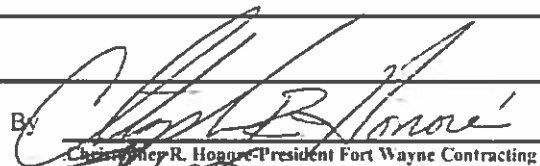
(Include City, State & Zip Code)

Christopher R. Honore-President Fort Wayne
Contracting Inc. Brandon G. King-Estimating
Manager-Ajax Paving

Signed and Sealed

This 27th dayof July, 20 15

By



Christopher R. Honore-President Fort Wayne Contracting

Brandon G. King-Estimating Manager-Ajax Paving

Title

(Printed Name of Signer)

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PROPOSAL

(Note: Bidder, if a corporation, shall cause the following certificate to be executed, provided that the same officer shall not execute both the proposal and the certificates.)

CERTIFICATE

I, James A. Jacob, certify that I am the

Corporate Secretary of the corporation named as Bidder herein;

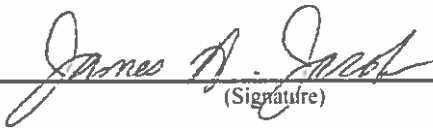
that Brandon G. King who signed this Proposal on behalf of said

corporation, was then Estimating Manager of said corporation;

that said Proposal was duly signed and the corporate seal affixed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

July 27, 2015

(Date)


(Signature)

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P. 7

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

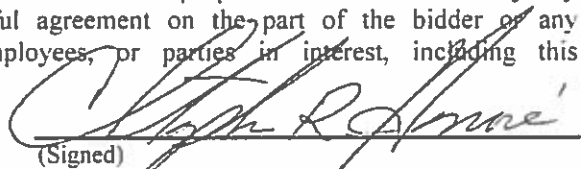
State of Michigan
 _____ SS
 County of Wayne

Christopher R. Honore being first duly sworn, deposes and says that:

1. He is President, Treasurer, Secretary of
 (owner, partner, officer, representative, or agent)

Fort Wayne Contracting, Inc., the bidder that has submitted the attached bid,

2. He is fully informed respecting the preparation and contents of the attached bid and of all pertinent circumstances respecting such bid;
3. Such a bid is genuine and is not a collusive or sham bid;
4. Neither the said bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder, firm or person to submit a collusive or sham bid in connection with the contract for which the attached bid has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person to fix the price or prices in the attached bid or any other bidder, or to fix any overhead, profit or cost element of the bid price or the bid price of any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Detroit or any person interested in the proposed contract; and
5. The price or prices quoted in the attached bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.



 (Signed)

President, Treasurer, Secretary

Title: Fort Wayne Contracting, Inc.

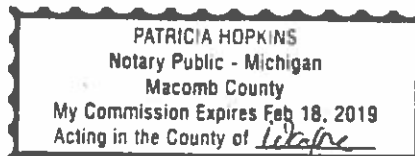
Subscribed and sworn to before me

this 27th day of July, 2015



 Title

My commission expires: 02/18/2019



AGREEMENT

CONTRACT TITLE HMA RESURFACING AND MISCELLANEOUS CONSTRUCTION ON W. GRAND BLVD BETWEEN WOODWARD & LINWOOD, VERNOR BETWEEN MICHIGAN & 17TH , VERNOR BETWEEN FISHER FREEWAY & LIVERNOIS, AND VERNOR BETWEEN DIX & CENTRAL FOR THE DEPARTMENT OF PUBLIC WORKS	CONTRACT NUMBER PW- 6972 CPO NO: 2913189
PARTY OF THE FIRST PART (The City) City of Detroit, Michigan, a municipal corporation acting through the DIRECTOR, DEPARTMENT OF PUBLIC WORKS COLEMAN A. YOUNG MUNICIPAL CENTER 2 WOODWARD AVENUE, SUITE 802 DETROIT, MICHIGAN 48226	DATE OF AGREEMENT
PARTY OF THE SECOND PART (Contractor) FORT WAYNE CONTRACTING, INC./AJAX PAVING INDUSTRIES, INC., A JOINT VENTURE 320 E. SEVEN MILE ROAD DETROIT, MII 48203	
CONTRACT PRICE THREE MILLION, EIGHT HUNDRED SIXTY-EIGHT THOUSAND, FOUR HUNDRED SIXTY AND 92/100 DOLLARS \$3,868,460.92	

Agreement made on the date as shown above, between the above named party of the first part, City of Detroit, hereinafter called the City, and the above named party of the second part, hereinafter called the Contractor.

Whereas, the City, by due advertisement, has invited proposals for doing the work hereinafter specified; and the Contractor has submitted a proposal which has been accepted, and the City Council has approved this Contract, the parties hereto do hereby, in consideration of the mutual covenants hereinafter contained, agree with each other as follows:

1. THE CONTRACT

The Contract Documents are composed of the individual parts as named by title in Article 2 of the Standard Instructions to Bidders, including the number of Bulletins above indicated issued by the City prior to the receipt of bids, and together form the Contract and are as fully a part of the Contract as if fully herein repeated. In case any question arises as to the identity of the Contract Documents or any individual parts thereof, the City Engineer shall identify them.

2. WORK INCLUDED

The work included consists of that contained and described in the proposal for the Contract above named by title and number.

3. TIME PROVISIONS

The Contractor shall begin work under this Contract at the time stipulated in the written notice of the City Engineer, acting for the City, issued in accordance with the provisions of the Article, "Time of Starting and Completing Work", in the

Special Notice to Bidders. Time being of the essence of this Contract, the Contractor shall thereafter prosecute the work diligently so as to assure the completion of the entire work not later than the time prescribed therefor, or the date to which the time of completion may have been extended pursuant to the provisions of the Article, "Delays and Extension of Time", of the General Conditions. The Contractor shall, if necessary to complete the work within such time, work nights, Sundays and holidays without any change in the Contract price.

4. LIQUIDATED DAMAGES

The Contractor guarantees that he can and will complete the work within the time limit stated in the Contract Documents, or within the time as extended as provided elsewhere in the Contract Documents. Inasmuch as the damage and loss to the City which will result from the failure of the Contractor to complete the work within the stipulated time, will be most difficult or impossible of accurate determination, it is mutually agreed that the damages to the City for such delay and failure on the part of the Contractor shall be liquidated in the amount stated in the Article, "Liquidated Damages", in the Special Notice to Bidders, for each and every calendar day by which the Contractor shall fail to complete the work or any part thereof within the provisions hereof, and such liquidated damages shall not be considered as a penalty.

The City will deduct and retain out of any money due or to become due hereunder the amount of the liquidated damages, and in case those amounts are less than the amount of liquidated damages the Contractor shall pay the difference upon demand of the City.

AGREEMENT

5. THE CONTRACT PRICE

For the Contractor's complete performance of the work under the Contract, the City will pay, and the Contractor agrees to accept, in full compensation therefor, the Contract price above stated, subject to the terms and conditions thereof. Nothing herein contained shall be construed, or be permitted to operate, as any restriction upon the power granted to the Common Council by the City Charter to audit and allow all accounts chargeable against the City.

A. Lump Sum Price Contract: Where the accepted Proposal was on a lump sum price basis, the Contract price above stated is subject to adjustments, if any, due to the additional cost or credits for work ordered by the City to be added or omitted in accordance with Article 19, "Changes or Modification of Contract", of the General Conditions.

B. Unit Price Contract: Where the accepted Proposal was on a unit price basis, the Contract price above stated is subject to such additions and deductions as may be necessary to conform to the actual quantities of the several items or classes of work performed at the unit prices stated in the accepted Proposal, and also, is subject to adjustments, if any, due to the additional cost or credits for work ordered by the City to be added or omitted in accordance with Article 19, "Changes or Modification of Contract", of the General Conditions.

6. DETAILED ESTIMATE

When required by the Special Notice To Bidders, the Contractor shall within 14 days after the execution of this Contract, submit a Detailed Estimate to the City Engineer for his approval on forms provided by the City Engineer, giving a breakdown of his price bid, or of lump sum bid for items of the Contract, showing for each major operation to be performed under the Contract, the individual items of work, with units, quantities, unit prices and total cost. The sum of the total cost of the individual items shall be equal to the total Contract price.

The Detailed Estimate, when approved by the City Engineer, shall be considered and become a part of the Contract. The approved Detailed Estimate may be used by the Engineer as a basis for preparing his estimates for progress payments and to provide unit prices for which extra work may be done and for which work ordered omitted may be deducted. No progress payments will be made until the Detailed Estimate has been approved by the City Engineer.

7. PROGRESS PAYMENTS

When the Special Notice to Bidders so provides, in order to assist the Contractor to prosecute the work advantageously, the City will make progress payments to the Contractor

The Engineer will from time to time as the work progresses, but usually not more often than once a month, prepare and certify an estimate that, in his judgement, represents the quantity and fair value of the work done by the Contractor, including such extra work performed as was ordered in writing by the City.

When the Detailed Estimate is required, the Engineer may use the prices contained in such Detailed Estimate. In case any of

the said prices do not, in the judgement of the Engineer, truly represent the actual relative costs of different parts of the work performed, the Engineer may prepare a new schedule of prices for use in preparing the estimate.

When the Special Notice to Bidders so provides, the Engineer may also include in the estimate the value of non-perishable materials, fixtures and equipment which, in the judgement of the Engineer, are suitably stored on the site on the last day of the estimate period. The value of such items shall not exceed the actual net cost to the Contractor as substantiated by invoices or other factual information deemed satisfactory by the Engineer.

After Approval of the Engineer's certified estimate by the City Officer, above named as acting for the City, a copy of the Engineer's estimate will be furnished the Contractor and the City will make payment to the Contractor as follows:

Unless otherwise provided in the Special Notice to Bidders, the City will retain from each progress payment, 10 percent of the total amount earned as stated in the Engineer's estimate until the total amount so retained shall equal 5 percent of the Contract price above stated. The City will then pay to the Contractor the amount so computed, less the aggregate of any and all amounts previously paid the Contractor, except that the City may further retain from any progress payment any deductions authorized to be made by the City under the terms of this Contract or by law.

The Engineer may withhold the preparation of a progress estimate whenever, in his judgement, the lack of proper progress by the Contractor so warrants. It is mutually understood by, and agreed between the parties hereto, that no progress payment by the City in itself shall be construed as evidence of satisfactory progress by the Contractor, or as evidence of performance of this Contract either in whole or in part, or construed to be an acceptance by the City of defective work or improper materials.

8. ACCEPTANCE AND FINAL PAYMENT

A. Contractor's Notification of Completion: When the Contractor considers all work required of him in the performance of this Contract, including any and all changes in the work ordered in writing by the City, to be complete and ready for final inspection, he shall so notify the Engineer in writing.

B. Contractor's Affidavits and Guarantees: The Contractor shall file with the Engineer as a condition precedent to final payment, the following:

a) An affidavit, on forms provided by the Engineer, that all payrolls, material bills and all other indebtedness incurred by him in connection with the work have been paid;

b) A release from the surety company on the Labor and Material Bond, in event that any claims have been previously filed pursuant to such bond, consenting to the final payment notwithstanding such filed claims;

c) Written guarantees and/or warranty bonds or certificates of inspection as may be specifically required under the terms of the Contract.

AGREEMENT

C. *Verified Statement of Claims:* The Contractor must also submit a final verified statement of any and all alleged unliquidated claims against the City in any way connected with or arising out of this Contract, including those as to which details may have been furnished pursuant to Articles 21 and 22 of the General Conditions, setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each such item; and if the alleged unliquidated claim be one of delay, the alleged clause of each such delay, the period or periods of time, giving the dates when the Contractor claims the performance of the work, or a particular part thereof, was delayed, and an itemized statement and breakdown of the amount claimed for each such delay. With reference to each such claim, the City shall have the same right to inspect, and make extracts or copies of, the Contractor's books, vouchers, records etc., as is referred to in said Articles 21 and 22. Nothing contained in this Article is intended to or shall relieve the Contractor from the obligation of giving timely notice of claims pursuant to said Articles 21 and 22. The Contractor is warned that unless such claims are completely set forth as herein required, the Contractor upon acceptance of the final payment, pursuant to "F" herein, will have waived any such claims.

D. *Engineer's Inspection and Final Estimate:* Upon receipt of the Contractor's written notification, the Engineer will promptly thereafter make such inspection.

If the Engineer finds the entire work not fully completed or portions thereof not acceptable under the terms of the Contract, he will so notify the Contractor in writing, itemizing what work is uncompleted and/or unacceptable. The Contractor shall then promptly complete and/or correct the work so itemized, and again notify the Engineer as required in "A" above.

When the Engineer finds the entire work fully completed and acceptable under the terms of the Contract and the Contract fully performed, he will prepare and certify a final estimate as to the whole amount of the work done by the Contractor and the value thereof under and according to the terms of the Contract, and will determine the unpaid balance due hereunder other than the amount of alleged unliquidated claims. Any and all prior progress estimates prepared by the Engineer under the provisions of Article 7 herein, upon which progress payments were made, being merely estimates made to determine the amount of progress payments to enable the Contractor to prosecute the work more advantageously, shall be subject to correction in the certified final estimate

E. *Approval of Final Payment:* Upon approval of the Engineer's certified final estimate by the City Officer, a copy of the approved final estimate will be furnished the Contractor. The City Officer will certify to the Common Council that all work required of the Contractor in the performance of the Contract has been completed and accepted by said City Officer under the terms and conditions thereof, and the total value of such work.

After audit and allowance by the Common Council, the total amount of the value of the work done will be paid to the Contractor by the City, less the total amounts previously paid on any or all progress payments when such were allowed and paid, less any deductions authorized to be made by the City under the terms of the Contract or by law. Such final payment shall be final and conclusive upon the Contractor.

F. *Acceptance of Final Payment:* The acceptance by the Contractor, or by anyone claiming by or through him, of the final payment, based on the Engineer's final estimate and the amount allowed by the Common Council, whether such payment be made pursuant to any judgement of any court, or otherwise, shall constitute and operate as a release to the City from any and all claims of and liability to the Contractor for anything theretofore done or furnished for or relating to or arising out of this Contract, and for any prior act, neglect or default on the part of the City or any of its officers, employees or agents, excepting only a claim against the City for amounts deducted or retained in accordance with the terms and provisions of this Contract or by law, and excepting a claim, not otherwise waived, which is contained in the verified statement filed by the Contractor pursuant to "C" above.

The Contractor is warned that his acceptance of the final payment with any reservation either orally or in writing, purporting to reserve claims other than those herein specifically excepted from the operation of this Article, or those deducted by the City from the final estimate as certified to by the Engineer, shall not be effective to reserve such claims, anything stated to the Contractor orally or in writing by any officer, employee or agent of the City to the contrary notwithstanding.

Should the Contractor refuse to accept the final payment as tendered by the City, it shall constitute a waiver of any right to interest thereon.

G. *Substantial Completion Payment:* When the work, in the judgement of the Engineer, has been substantially but not entirely completed, and full completion thereof is materially delayed through no fault of the Contractor, and the Engineer so certifies, the City may, upon certificate of such substantial completion made by the City Officer, make payment to the Contractor of any part or all of the balance due under the Contract, including amounts retained from any previous progress payments, less the value of work still to be done, as the Engineer shall judge to be fair and equitable, for that portion of the work certified as substantially complete and accepted, and less any deductions authorized to be made by the City under the terms of the Contract or by law. Such payment shall be made under the terms and conditions governing final payment.

7/27/15
uploaded

AGREEMENT


IN WITNESS WHEREOF, the *City* and the *Contractor*, by and through their authorized officers and representatives, have executed this *Contract* as of the date first above written.

WITNESSES:

1. 
(Signature)

Patricia Hopkins

(Print Name)

2. 
(Signature)

Sharon Danis

(Print Name)

CONTRACTOR:

BY 
(Signature)

Christopher R. Honore

(Print Name)

ITS: President-Fort Wayne Contracting
(Title)



Brandon G. King

Est. Manager-Ajax Paving Industries, Inc.

WITNESSES:

1. 
(Signature)

Pamela Parker

(Print Name)

2. 
(Signature)

LaSandra Holman

(Print Name)

CITY OF DETROIT - DPW

BY 
(Signature)

Ron Brundidge

ITS: **DIRECTOR**

PW- 6972 HMA Resurfacing W Grand Blvd & Vernor

**THIS CONTRACT WAS APPROVED
BY THE CITY COUNCIL ON:**

October 20, 2015

DocuSigned by:

Boysie Jackson

11/18/2015

Purchasing Director

Date

**APPROVED BY LAW DEPARTMENT
PURSUANT TO §6-406 OF THE
CHARTER OF THE CITY OF
DETROIT**

DocuSigned by:

Pamela Parrish

11/6/2015

Corporation Counsel

Date

**THIS CONTRACT IS NOT VALID OR AUTHORIZED UNTIL APPROVED BY
RESOLUTION OF THE CITY COUNCIL AND SIGNED BY THE PURCHASING
DIRECTOR.**

CITY ACKNOWLEDGMENT

STATE OF _____)

)SS.

COUNTY OF _____)

The foregoing contract was acknowledged before me the _____ day of _____, 2015 by

Ron Brundidge, the Director of the Department of Public Works

on behalf of the City.

**PW-6972 HMA Resurfacing on W.
Grand Blvd & W. Vernor**

**Notary Public, County
of: _____**

Signature of Notary

State of: _____

My commission expires: _____

CORPORATE ACKNOWLEDGMENT

STATE OF Michigan)

)SS.

COUNTY OF Wayne)

The foregoing contract was acknowledged before me the 31st day of August, 20 15,

by Christopher R. Honore & Brandon G. King

(Name of person who signed the contract)

the President-Fort Wayne Contracting, Inc./Estimating Manager-Ajax Paving, Industries, Inc.

(Title of person who signed the contract as it appears on the contract)

Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., a joint venture
of _____

(Complete name of the corporation)

on behalf of the Corporation.

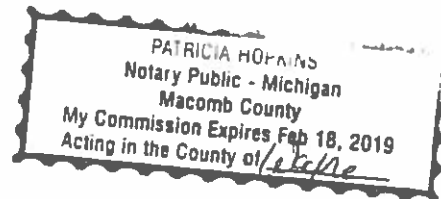
PW-6972 HMA Resurfacing on W. Grand &
W. Vernor

Notary Public,
County of: Macomb

Patricia Hopkins
Signature of Notary

State of: Michigan

My commission expires: 02/18/2019



CORPORATION CERTIFICATE OF AUTHORITY

Christopher R. Honore, Corporate Secretary of Fort Wayne Contracting, Inc.

I, James A. Jacob, Corporate Secretary of Ajax Paving Industries, Inc., Corporate Secretary of
(name of corporate secretary)

Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., Joint Venture, a Michigan

for profit corporation (the "Corporation"), DO HEREBY CERTIFY that the following is a true and correct excerpt from the minutes of the meeting of the Board of Directors duly called and held on Fort Wayne: 09/15/14-Ajax: 03/31/15 and that the same is now in full force and effect:
(date of meeting)

"RESOLVED, that the Chairman, the President, each Vice President, the Treasurer, and the Secretary and each of them, is authorized to execute and deliver, in the name of and on behalf of the Corporation and under its corporate seal or otherwise, any agreement or other instrument or document ('Contract') in connection with any matter or transaction that shall have been duly approved; and the execution and delivery of any Contract by any of the aforementioned officers shall be conclusive evidence of such approval."

I FURTHER CERTIFY that

Christopher R. Honore-Fort Wayne Contracting/Mark Johnston-Ajax Paving
David R. Cowper, P.E.- Ajax Paving Industries, Inc.
Christopher R. Honore-Fort Wayne Contracting/James A. Jacob-Ajax Paving
Christopher R. Honore-Fort Wayne Contracting/James A. Jacob-Ajax Paving
Brandon G. King

is Chairman
is President
is (are) Vice President(s),
is Treasurer,
is Secretary,
is Executive Director, and
is Estimating Manager.

I FURTHER CERTIFY that any of the aforementioned officers or employees of the Corporation are authorized to execute and commit the Corporation to the conditions, obligations, stipulations and undertakings contained in CPO No. 2913189, PW-6972, HMA Resurfacing & Miscellaneous Construction on W. Grand Blvd and W. Vernor between Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., a joint venture and the City of Detroit, acting through the Director of the Department of Public Works and that all necessary corporate approvals have been obtained in relationship thereto.

IN WITNESS THEREOF, I have set my hand this 31st day of August, 2015.

CORPORATE SEAL
(if any)

Christopher R. Honore
Corporate Secretary-Fort Wayne Contracting, Inc.

James A. Jacob
Corporate Secretary-Ajax Paving Industries, Inc.

PLEASE NOTE THAT THE PERSON WHO SIGNS THE CONTRACT ON BEHALF OF YOUR CORPORATION MUST BE ONE OF THE INDIVIDUALS LISTED ABOVE AS A PERSON AUTHORIZED TO EXECUTE CONTRACTS IN THE NAME OF AND ON BEHALF OF THE CORPORATION.

JOINT VENTURE AGREEMENT

This Joint Venture Agreement ("Agreement") is made and entered into by and between Fort Wayne Contracting, Inc. ("FWC"), a Michigan corporation whose principal office is located at 320 E. Seven Mile Rd., Detroit, MI 48203, and Ajax Paving Industries, Inc. ("Ajax"), a Michigan corporation whose principal office is located at 830 Kirts Blvd., Ste. 100, Troy, MI 48084 on this 27th day of July, 2015.

IN CONSIDERATION of the mutual promises and undertakings hereinafter specified, the receipt and sufficiency of which is hereby acknowledged, FWC and Ajax AGREE AS FOLLOWS:

1. JOINT VENTURE

FWC and Ajax hereby agree to a contractual joint venture subject to the terms and conditions set forth in this Agreement (the "Joint Venture"). The name and business address of the Joint Venture solely for the purpose set forth below shall be:

"Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., Joint Venture"
320 E. Seven Mile Rd.
Detroit, MI 48203

2. PURPOSE, SCOPE AND TERM OF JOINT VENTURE

(A) PURPOSE

The sole and exclusive purpose of the Joint Venture is to bid upon and enter into a contract (the "Contract") with the City of Detroit (the "Owner") relating to that certain Proposal for PW6972 HMA Resurfacing & Misc. Construction on W. Grand Blvd between Woodward & Linwood, W. Vernor between Michigan and 17th, W. Vernor between Fisher Freeway & Livernois and W. Vernor between Dix & Central (the "Project") and to do all things reasonably incident to the full performance of the Contract and construction of the Project. The Joint Venture shall have no other purpose and shall not create any partnership or other permanent relationship between FWC and Ajax. Further, the Joint Venture shall not preclude either FWC or Ajax from pursuing their own separate business so long as they do so in their own names and assume full and exclusive responsibility with respect to such separate business activities and no party to this Agreement shall have any right to participate in the results of any other activities or operations conducted by the other party to this Agreement, whether

severally or jointly with others (including the City of Detroit). For the avoidance of doubt, the Joint Venture shall not take legal title to any real or personal property of any kind.

(B) SCOPE

The scope of the Joint Venture is limited to performance of the Contract for, and complete construction of, the Project, including all activities reasonably incidental thereto. Nothing contained in this Agreement, or otherwise, shall constitute the parties as partners, or obligate them to make any capital contribution to the Joint Venture, obligate them to undertake any fiduciary duty other than as expressly set forth herein or entitle them to any participation in the results of the joint venture other than as specified in this Agreement.

(C) TERM

The term of the Joint Venture shall commence upon the date of this Agreement and shall expire on the earlier to occur of the following:

i. Final acceptance by Owner of the work under the terms of the Contract, receipt of all funds owed by Owner to the Joint Venture under the Contract and the final distribution of all funds received from the Owner under the Contract; or

ii. Termination of the Contract and the final distribution of all funds received from the Owner under the Contract;

provided, however, that the Joint Venture shall not terminate in either (i) and (ii) if there are any outstanding disputes, claims or other matters in controversy arising out of or relating to performance of the work under the Contract or this Agreement. Notwithstanding the foregoing, the Joint Venture shall terminate if the Owner, for whatever reasons, refuses or fails to execute the Contract for the Project and may also be terminated at any time upon the unanimous consent of FWC and Ajax.

3. RIGHTS AND RESPONSIBILITIES OF FWC AND AJAX

(A) PERFORMANCE OF THE CONTRACT

FWC and Ajax agree that FWC will:

i. Be substantially included in all phases of the Contract, including but not limited to bidding and staffing;

- ii. Provide at least fifty-one (51) percent of the total Contract performance, responsibility and project management;
- iii. Receive at least fifty-one (51) percent of the total remuneration from the Contract; and
- iv. Share in profits and losses.

FWC and Ajax, pursuant to this Agreement, bind themselves jointly and severally to execute the Contract for the Project if awarded by the Owner and to fully perform the requirements of the Contract when executed.

(B) SELF-PERFORMED WORK

FWC and Ajax will be subcontractors to the Joint Venture. The work on the Project consists of work that will be performed by FWC and Ajax entirely with their own labor, equipment, materials and supplies or through second tier subcontractors (hereinafter referred to as "Self-Performed Work").

- i. FWC's Self-Performed Work is designated on the attached Exhibit A, which constitutes at least fifty one percent (51%) of the total contract performance and remuneration based upon the design quantities of the work specified by the City in the bidding documents and the bid prices submitted or to be submitted for that work by the Joint Venture. FWC shall be solely and completely responsible for all materials, supplies, labor, equipment, permits, licenses, taxes and other facilities required, and all expenses incurred to perform its items of Self Performed Work in accordance with the contract specifications and schedule. FWC shall receive compensation for the performance of this work in accordance with the contract value ascribed to such work in FWC's subcontract with the Joint Venture, which value shall not be less than fifty one percent (51%) of the total contract value based upon bid quantities and bid prices. FWC shall be solely responsible for any and all losses incurred or damages sustained in the performance of its Self Performed Work.

In the event extra work or changed work is ordered by the Owner which is within the general scope of such work and is to be self-performed by FWC, FWC shall be solely and completely responsible for the cost estimating and performance of such work and shall receive 100% of the compensation paid by the Owner for such work and FWC shall be solely responsible for any losses incurred or damages sustained in the performance of such work.

It is the express intent and agreement of FWC and Ajax that the Joint Venture shall not be responsible for, nor be obligated to subsidize or otherwise defray any losses sustained by FWC for whatever reason, arising out of or relating to FWC's Self-Performed Work, nor shall the Joint Venture be entitled to any share of the profits, including any extraordinary or windfall profits, which may result from changes in FWC's Self-Performed Work.

- ii. Ajax's Self-Performed Work is designated on the attached Exhibit A. Ajax shall be solely and completely responsible for all materials, supplies, labor, equipment, permits, licenses, taxes and other facilities required, and all expenses incurred to perform these work items in accordance with the contract specifications and schedule. Ajax shall receive compensation for the performance of this work in accordance with the contract value ascribed to such work in Ajax's subcontract with the Joint Venture. Ajax shall be solely responsible for any and all losses incurred or damages sustained in the performance of its Self Performed Work.

In the event extra work or changed work is ordered by the Owner which is within the general scope of such work and is to be self-performed by Ajax, Ajax shall be solely and completely responsible for the cost estimating and performance of such work and shall receive 100% of the compensation paid by the Owner for such work and Ajax shall be solely responsible for any losses incurred or damages sustained in the performance of such work.

It is the express intent and agreement of FWC and Ajax that the Joint Venture shall not be responsible for, nor be obligated to subsidize or otherwise defray any losses sustained by Ajax, for whatever reason, arising out of or relating to Ajax's Self-Performed Work, nor shall the Joint Venture be entitled to any share of the profits, including any extraordinary or windfall profits, which may result from changes in Ajax's Self-Performed Work.

(C) NO INDIVIDUAL AUTHORITY TO BIND JOINT VENTURE

Neither Ajax nor FWC shall have the individual authority to bind or obligate the other with respect to any matter whatsoever arising out of or relating to the Project or any other matter nor shall either FWC or Ajax have the individual authority to bind the Joint Venture to any obligation, contract, arrangement, agreement, release, waiver, accommodation, loan, guaranty or other matter of whatsoever nature.

(D) INDEMNIFICATION

Notwithstanding the joint and several obligation of FWC and Ajax for performance of the Contract recited in subparagraph (A) above, FWC and Ajax shall each indemnify, hold harmless and defend the other and their respective employees, shareholders, officers, directors, agents and affiliates from and against any and all claims, demands, suits, causes of action, proceedings, costs, damages, judgments, expense (including reasonable actual attorney and expert witness and consultant fees), interest, and liabilities of whatsoever nature (each a "Claim"), whether arising before or after completion of the work under the Contract, which result from, relate to or arise out of: (i) that party's Self-Performed Work; (ii) that party's unauthorized acts on behalf of or in the name of the Joint Venture or the other party; (iii) injury or death of any person employed by that party or acting under that party's direction, supervision or control, unless such injury or death is due to the sole negligence of the party to be indemnified; (iv) that party's failure to fully pay or discharge any debt, expense or cost attributable to that party's Self-Performed Work; (v) indemnification of any surety pertaining in any way to that party's Self Performed Work; (vi) damage to or destruction of property or to wholly or partially completed portions of the Work (including trespass, nuisance and deprivation of the use of real property) provided that such damage or destruction is due

to that party's acts or omissions in the performance of that party's Self-Performed Work and is not otherwise covered by insurance; (vii) any material breach of any covenant, representation or warranty of this Agreement by that party; and (viii) any environmental, health and safety liabilities arising out of or relating to that party's Self-Performed Work, including any Claims arising out of, related to or incurred in connection with any pollution, threat to the environment or human health, exposure to or manufacture, processing, distribution, use, treatment, generation, transport or handling, disposal, emission, discharge, storage or release of hazardous material (as defined by any environmental law). For purposes of clause (viii), "environmental laws" shall mean any applicable federal, state or local statute, regulation, ordinance, or rule of common law relating to the protection of the environment including, without limitation, any applicable provisions of the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. § 9601 et seq.), the Hazardous Materials Transportation Act (49 U.S.C. App. § 1801 et seq.), the Resource Conservation and Recovery Act (42 U.S.C. § 6901 et seq.), the Clean Water Act (33 U.S.C. § 1251 et seq.), the Clean Air Act (42 U.S.C. § 7401 et seq.), the Toxic Substances Control Act (15 U.S.C. § 2601 et seq.), and the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. § 136 et seq.), and the regulations promulgated pursuant thereto.

The indemnification obligations hereunder shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the indemnifying party under Worker's Compensation Acts, disability benefit acts, or other employee benefits acts.

As a condition to indemnification, the indemnified party will notify the indemnifying party of the assertion of any claim or the commencement of any proceeding, audit or assessment with respect to any Claim for which indemnity may be sought under this Section. Failure to notify the indemnifying party of a Claim shall not relieve the indemnifying party of any liability that it may have to any indemnified party except to the extent that the indemnifying party demonstrates that the defense against the Claim is prejudiced by the indemnified party's failure timely to give the notice. The indemnified party will give the indemnifying party such information with respect thereto as it may reasonably request. The indemnifying party will thereafter consult with the

indemnified party upon the indemnified party's reasonable request for such consultation from time to time with respect to any proceeding, audit or assessment. No compromise or settlement of any Claim may be effected by the indemnifying party without the indemnified party's written consent (that will not be unreasonably withheld or delayed) unless (A) there is no finding or admission of any violation of legal requirements or any violation of the rights of the indemnified party or its employees, shareholders, officers, directors, agents and affiliates and no effect on any other claims that may be made against the indemnified party, and (B) the sole relief provided is monetary damages that are paid in full by the indemnifying party.

With respect to the defense of any claims asserted against a party to be indemnified hereunder, the party being indemnified shall have the right to reasonably approve defense counsel selected by the indemnifying party.

The rights of Ajax and FWC relating to indemnification under this Agreement shall survive the termination of this Agreement.

4. MANAGEMENT

(A) EXECUTIVE COMMITTEE

The affairs of the Joint Venture shall be managed by an Executive Committee consisting of one representative from each of FWC and Ajax. FWC hereby appoints Christopher R. Honre as its representative and Ajax hereby appoints Clarence Jones as its representative. FWC and Ajax represent and warrant, each to the other, that its appointed representative is duly authorized to act on its behalf; that the actions of its representative shall, in the absence of fraudulent or dishonest conduct, be conclusively binding upon the company; and that its representative shall serve on the Executive Committee at its sole expense without expectation of compensation from the Joint Venture.

All administrative and managerial functions of the Joint Venture shall be the responsibility of the Executive Committee and all decisions, agreements, undertakings, subcontracts, contract modifications and other matters concerning the Joint Venture's performance of the Contract shall be by unanimous action of the Executive Committee; provided, however, decisions undertaken in the ordinary course

of business relating to Self-Performed Work may be made by the party undertaking such work.

In the event a dispute arises between the members of the Executive Committee concerning such matters, Ajax or FWC may submit the dispute to arbitration as provided in paragraph 12 of this Agreement.

(B) MEETINGS The Executive Committee shall meet as often as is necessary and reasonable, but in no event less frequently than once every month while work is being performed on the Project, to remain fully apprised as to the status of work and other matters pertaining to the Project and to act on matters relating to the Joint Venture's performance of the Contract.

5. BANK ACCOUNT

Ajax and FWC shall establish a general deposit account at a mutually agreeable financial institution. The account shall be jointly owned by each of FWC and Ajax. FWC and Ajax shall each furnish to the financial institution such corporate resolutions and other documents as may be required for the establishment of the Joint Account. All monies received under the contract for the Project shall be deposited into the Joint Account. All disbursements from and checks or drafts drawn upon the Joint Account must be authorized by an authorized representative of each of FWC and Ajax.

6. USE AND DISBURSEMENT OF CONTRACT FUNDS

All funds received from the Owner under the Contract shall be used and disbursed to pay each of FWC and Ajax for their respective shares of Self-Performed Work; provided, however, any amounts that would otherwise be paid to either FWC or Ajax may be reduced in order to pay (or reimburse the other party for) such party's respective share of: (i) ordinary operation expenses described in Paragraph 7.(A) below; (ii) bond costs pursuant to Paragraph 10 below; (iii) insurance costs and deductibles pursuant to Paragraph 11 below; or (iv) to pay any other expense unanimously approved by the Executive Committee in writing.

7. ACCOUNTING

(A) JOINT VENTURE ACCOUNTS

The Joint Venture shall maintain separate books of account for the Project and all matters incidental thereto. The books of account shall be maintained in

accordance with generally accepted accounting principals on a cash basis and limited to receipts of funds by the Joint Venture from the Owner under the contract and disbursement of those funds in accordance with this Agreement. Ajax shall administer and maintain the Joint Venture's books of account without charge to the Joint Venture for such service and shall provide FWC with copies of the monthly account statements and records. The accounts of the Joint Venture shall be open to both FWC and Ajax for inspection at all reasonable times. Expenses for regulatory fees, bank fees, audits by outside examiners (unanimously approved by the Executive Committee in accordance with this Agreement), and any required additional computer programs exclusively dedicated to the Joint Venture shall be deemed as ordinary expense of the Joint Venture and paid directly by the Joint Venture or reimbursed to the party incurring such expenses on behalf of the Joint Venture pursuant to that party's reimbursement invoice. Any expense or series of related expenses that are in excess of \$1,000 must be unanimously approved by the Executive Committee

(B) AUDITS

The Executive Committee may direct that periodic audits of the Joint Venture's books of account be conducted. In that event, the party not responsible for maintaining the books of account shall designate the independent accounting firm to conduct such audits subject to the reasonable approval of the other party.

(C) FINAL ACCOUNTING AND DISTRIBUTION

Upon completion of the Contract, final acceptance of the work by the Owner and release of final payment including all retention, a final accounting shall be made of all receipts, costs, expenses, accounts and underlying project records pertaining to the performance of the Contract. If directed by the Executive Committee, an independent audit (by an auditor selected by the party not responsible for maintaining the Joint Venture's books of account) of the final accounting shall be conducted.

After payment of all debts and expenses relating to performance of the Contract in accordance with the provisions of paragraph 6, the Executive Committee shall make a final distribution to FWC and Ajax of all remaining funds in the Joint Venture's accounts. All Joint Venture profits, interest earned on Joint Venture funds and

the proceeds from the sale of any Joint Venture property, if any, shall be divided equally between FWC and Ajax.

(D) CONTRACT PRICE ALLOCATION

FWC and Ajax have compiled and agreed upon the allocation of the contract price to the various components of the Project and the parties' respective responsibilities for major categories of expenses arising out of and relating to the performance of the work on the Project.

FWC and Ajax's mutual statement of this contract price allocation and expense statement is delineated in Exhibit A. Unless otherwise agreed upon between FWC and Ajax and amended by the Executive Committee, Exhibit A shall govern the allocation of responsibilities between Ajax, FWC and the Joint Venture for the various expenses delineated therein.

8. MAINTENANCE OF RECORDS

The Joint Venture, FWC and Ajax shall each maintain all records relating to the Project as required by the Contract for that minimum period of time specified in the Contract following final payment on the Contract. Notwithstanding the foregoing, the parties shall maintain records for a minimum of five (5) years and longer if one party informs the other party of a legal obligation to so maintain the records for a longer period.

9. CLAIMS

(A) CLAIMS AGAINST THE OWNER

In the event the Executive Committee elects to cause the Joint Venture to pursue any claims against the Owner or other parties to recover compensation due to, or pursue damages incurred by the Joint Venture, the expense of pursuing such claims shall be an expense of the Joint Venture and shared equally by FWC and Ajax.

Should either FWC or Ajax elect to pursue claims against the Owner or any other party for compensation due or damages sustained relating to or arising out of Self-Performed Work, the Joint Venture shall cooperate in the prosecution of such claims. However, the party pursuing the claim shall furnish its own attorney and be solely responsible for all expenses incurred in prosecuting the claim(s).

10. BONDS

The Joint Venture will furnish 100% Performance and Payment Bonds to the Owner issued jointly and severally by the Joint Venture and the sureties for FWC and Ajax and shall equally share the expense of such bonds. In the event of any claims upon said bonds, FWC and Ajax shall immediately and fully hold harmless, defend and indemnify the other and its corresponding surety from and against any and all claims, demands, suits, damages, expenses, and costs (including attorney fees), arising out of or relating to that party's Self-Performed Work.

Unless otherwise unanimously agreed to by the Executive Committee, any reimbursement of bond costs shall be distributed in equal shares to FWC and Ajax.

11. INSURANCE

11.1 REQUIRED COVERAGES

Furnishing the required Builders Risk (if required by the Owner), General Liability, Excess Liability Umbrella, and other insurance coverages specified in the Contract, excepting Workers Compensation coverages which shall be the individual expense of the parties, shall be an expense of the Joint Venture and shared equally by FWC and Ajax. Both FWC and Ajax shall be named additional insureds on all such policies, excepting Workers Compensation insurance policies, and all such policies shall contain provisions prohibiting cancellation of coverage without at least thirty (30) days written notice of such cancellation being given by the insurance carrier(s) to all named insureds.

11.2 DEDUCTIBLES

Full payment of deductibles on claims under the General Liability coverages shall be the responsibility of the party (FWC or Ajax) who performed the Self-Performed Work to which the claim related. If the claim does not relate to Self-Performed Work, full payment of deductibles on claims under the General Liability coverages shall be the responsibility of the party (FWC or Ajax) determined to be more than ninety percent (90%) at fault for the occurrence giving rise to the claim. For purposes of this determination the term "party" includes subcontractors, suppliers and others working for or at the direction of the party.

Should the claim not relate to Self-Performed Work and neither party (FWC or Ajax) be more than ninety percent (90%) at fault for the occurrence giving rise

to the claim, the deductible payment shall be an expense of the Joint Venture and shared equally by FWC and Ajax.

Full payment of the deductible for claims under the Builder's Risk coverage (if required by the Owner) shall be the responsibility of the party (FWC or Ajax) receiving the greater share of the claim proceeds or payment made by the insurance carrier.

12. ARBITRATION

All disputes and controversies between FWC and Ajax or between either of them and the Joint Venture arising out of or relating to this Joint Venture Agreement or the performance of the work under the Contract shall be resolved by arbitration conducted in accordance with the American Arbitration Association ("AAA") Construction Industry Arbitration Rules. The parties may elect to conduct the arbitration as a private arbitration utilizing arbitrator(s) mutually acceptable to the parties. If the parties are unable to agree upon the appointment of the arbitrator(s) to conduct the arbitration, the parties shall submit the arbitration to the AAA for administration of the arbitration. Written demand for arbitration shall be served by the party demanding arbitration of the dispute upon the other party within such time as is reasonable under the circumstances and, in no event, later than one (1) year following final completion and acceptance of the Project by the Owner. The parties shall agree upon the arbitrator(s) or submit the dispute for administration by the AAA within forty five (45) calendar days of the date of the demand for arbitration. Venue for the arbitration shall be as agreed upon by the parties or as directed by the AAA, as applicable. The party obtaining a net positive award in its favor shall be deemed the "prevailing party" and shall be entitled to recovery of all costs, administrative and arbitrator expenses and reasonable actual attorney fees incurred in the arbitration and the arbitrator(s) are hereby empowered to render an award of such expenses to the "prevailing party." Judgment upon the award of the arbitrator(s) may be entered in any court of competent jurisdiction.

13. DEFAULT

A default of this Agreement shall occur if, at any time, FWC or Ajax:

- (A) Fails, refuses or becomes unable to perform the terms of this Agreement or its work upon the Project in accordance with the requirements of the Contract;
- (B) Becomes unable to discharge its financial obligations with respect to this Agreement or its work under its subcontract with the Joint Venture; is adjudged insolvent; makes an assignment for the benefit of creditors; suffers the appointment of a receiver; commences or, allows to be commenced against it, any petition in bankruptcy or under any other law or statute for the relief of debtors and such condition is not cured, discharged or vacated within thirty (30) days.

Upon written notice of the occurrence of a default, the defaulting party shall have five (5) days from the date of the other party's written notice of default to fully cure and remedy such default; provided further, that no cure period shall be required for a breach which by its nature cannot be cured. If the default is not fully cured within said five (5) day period, then, effective upon the date of the Notice of Default, the other party at its option and in addition to any other rights and remedies it may have; may enforce the following:

- (A) The defaulting party shall be prohibited from any further involvement in the management of the affairs of the Joint Venture.
- (B) The defaulting party shall cease further performance or attempted performance of the work on the Project and shall not remove any equipment, materials or supplies from the Project premises or materials stockpile sites.
- (C) The defaulting party shall be deemed to have fully surrendered and assigned all of its right, title and interest in the Joint Venture, this Agreement, all Joint Venture assets, contracts and accounts, and its subcontract with the Joint Venture, including all earnings thereunder, to the other party and the other party may, without objection or interference by the defaulting party, take possession of all of the defaulting party's equipment, materials and supplies for purposes of continuing and

completing the work under the defaulting party's subcontract with the Joint Venture.

- (D) The defaulting party shall be and remain liable to the other party under every provision of this Agreement and for any losses or damages sustained by the Joint Venture or the other party resulting from the default.

14. NOTICES

Any notices required or issued under this Agreement shall be deemed delivered when in writing and delivered personally or sent to the other party via facsimile and first class United States mail postage prepaid to FWC or Ajax at the following addresses:

Fort Wayne Contracting, Inc.
320 E. Seven Mile Rd.
Detroit, MI 48203
Attn: Christopher R. Honore

Ajax Paving Industries, Inc.
830 Kirts Blvd., Ste. 100
Troy, MI 48084
Attn: Brandon G. King

15. ENTIRE AGREEMENT

This Agreement is the entire agreement between the parties and supersedes all prior written or verbal agreements or understandings between FWC and Ajax concerning the Project. No alteration, modification or amendment of this Agreement shall be valid or binding unless agreed upon in writing signed by both FWC and Ajax.

This Agreement shall be deemed to have been mutually drafted and in the case of any ambiguity and in the case of any ambiguity shall not be strictly construed against one party as the presumed author.

In the event any provision of this Agreement is found to be unlawful or unenforceable, such provision shall be considered stricken and the remaining provision shall remain in full force and effect.

It is the intent of the parties that the terms and provisions of this Agreement and the performance of this Agreement be in full compliance with the requirements of the City of Detroit Code of Ordinances Chapter 18, Article V, Section 18-5-1 and 18-5-2. In the event that any term or provision of this Agreement or the parties' intended manner

of performance of this Agreement is deemed by the City to be inconsistent with or in violation of the above cited requirements, the parties agree that they shall mutually make such amendments to this Agreement so as to be in full compliance with such requirements.

16. ASSIGNMENT; THIRD PARTY BENEFICIARIES

Except for the "assignment upon default provisions" contained in paragraph 13, neither party may assign, transfer, or voluntarily or involuntarily encumber its interest, rights or obligations under this Agreement without the prior written consent of the other party. Nothing expressed or referred to in this Agreement will be construed to give any person other than the parties to this Agreement any legal or equitable right, remedy or claim under or with respect to this Agreement or any provision of this Agreement.

17. GOVERNING LAW

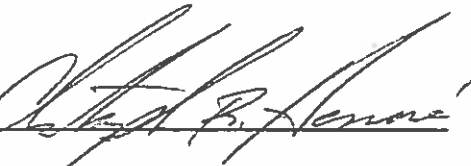
This Agreement and the respective rights and obligations of FWC and Ajax hereunder shall be governed by the laws of the State of Michigan without regard to conflicts of law principles.

18. COUNTERPARTS

This Agreement may be executed in one or more counterparts, all of which taken together will constitute one instrument. Any signature page delivered via facsimile, e-mail or other electronic or digital means shall be binding to the same extent as an original signature page.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

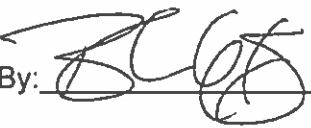
FORT WAYNE CONTRACTING, INC.

By: 

Name: Christopher R. Honoré

Its: President

AJAX PAVING INDUSTRIES, INC.

By: 

Name: Brandon G. King

Its: Estimating Manager

BID BOND City of Detroit Construction Contract		Contract Number	PW- 6972
Principal	Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc. Joint Venture 300 E. Seven Mile Road, Detroit, MI 48203		Date of Bid July 27, 2015
Surety	Liberty Mutual Insurance Company 5600 New King Street, Suite 360, Troy, MI 48098		Date Bond Executed July 27, 2015
Amount of Bond (express in words and figures) Five Percent of Accompanying Bid			5% of Bid

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, The Principal above named has submitted to the City of Detroit, Michigan, a municipal corporation, hereinafter called the City, a proposal or bid, dated as shown above, on the above numbered contract.

NOW THEREFORE, We the Principal and Surety, bind ourselves to the City in the amount of the bond stated above, that if the above proposal is accepted, the Principal will promptly enter into contract in accordance with the proposal. otherwise the Principal and/or Surety will pay the amount stated above unto the City of Detroit as liquidated damages.

SIGNED AND SEALED on the date indicated above.

In Presence of: Witness

Individual Principal

1. _____ as to _____ (L.S.)
2. _____ as to _____ (L.S.)
3. _____ as to _____ (L.S.)
4. _____ as to _____ (L.S.)

Attest

Corporate Principal

Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc. Joint Venture

Business
Address:

300 E. Seven Mile Road, Detroit, MI 48203

By

Brandon G. King
Brandon G. King
 Title *Brandon G. King*
President *Estimating Manager*

AFFIX
CORPORATE
SEAL

Attest

Corporate Surety

Liberty Mutual Insurance Company

Business
Address:

5600 New King Street, Suite 360, Troy, MI 48098

By

Michelle Buechel
 Title *Michelle Buechel*
Michelle Buechel, Attorney-in-fact

AFFIX
CORPORATE
SEAL

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, Christopher B. Monroe / James A. Jacob, certify that
I am the Corporate secretary

Of the corporation named as principal in the within bond:

that Christopher B. Monroe / Brandon G. Ming, who signed the said bond
on behalf of the principal, was then President / Estimating Manager
of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed
and attested for and in behalf of said corporation by authority of its governing body.

Christopher B. Monroe (CORPORATE)
James A. Jacob (SEAL)

Instructions

1. This form shall be used for construction work wherever a Bid Bond is required. There shall be no deviation from this form except as authorized by the Corporation Counsel of the City of Detroit.
2. The surety on the bond may be any corporation licensed by the State of Michigan to act as surety and satisfactory to the City of Detroit.
3. The name, including full Christian name, and business or residence address of each individual party to the bond shall be inserted in the space provided therefor, and each party shall sign the bond with his usual signature on the line opposite the scroll seal.
4. If the principals are partners, their individual names shall appear in the space provided therefor, with the recital that they are partners composing a firm, naming it, and all the members of the firm shall execute the bonds as individuals.
5. If the principal as well as the surety is a corporation, the name of the state in which each is incorporated shall be inserted in the spaces provided therefor, and said instrument shall be executed and attested under corporate seal for each as indicated on the form.
6. The official character and authority of the person or persons executing the bond for the principal, if a corporation, shall be certified by the secretary or assistant secretary, according to the form herein provided. In lieu of such certificate, there may be attached to the bond copies of so much of the records of the corporation as will show the official character and authority of the officer signing, duly certified by the secretary or assistant secretary under the corporate seal, to be true copies.
7. The date of this bond must not be prior to the date of instrument in connection with which it is given.

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6949848

American Fire and Casualty Company
The Ohio Casualty Insurance CompanyLiberty Mutual Insurance Company
West American Insurance Company**POWER OF ATTORNEY**

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Anne Barick; Holly Nichols; Michael D. Lechner; Michelle Buechel; Paul M. Hurley; Richard S. McGregor; Robert D. Heuer; T. R. Guy

all of the city of Troy, state of MI each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 15th day of April, 2015.



American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 15th day of April, 2015, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notary Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires March 28, 2017
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 27th day of July, 2015.



By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

Bond No.
013127448**PERFORMANCE BOND**
(See Instructions on Reverse Side)CONTRACT NO
PW- 6972
CPO NO: 2913189

PRINCIPAL (Name, and legal status)

**Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., a
joint venture**

DATE OF CONTRACT

SURETY

Liberty Mutual Insurance Company

DATE BOND EXECUTED

AMOUNT OF BOND (Express in words and figures)

**Three Million, Eight Hundred Sixty-eight Thousand, Four Hundred Sixty and 92/100 dollars
\$3,868,460.92**

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL and SURETY above named, are held and firmly bond unto the City of Detroit, Michigan, a municipal corporation, hereinafter called the City, in the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the City, numbered and dated as shown above and hereto attached, and which shall be deemed a part hereof as fully as if set out herein.

AND WHEREAS, This bond is given in compliance with and subject to the provisions of Act No. 351 of the Public Acts of Michigan, for the year 1972, and the provisions of the City of Detroit Charter.

NOW, THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the City, with or without notice to the surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

PRINCIPAL: ☐ INDIVIDUAL ☐ DOING BUSINESS UNDER ASSUMED NAME ☐ PARTNERSHIP

NAMES OF
ALL
PARTNERSBUSINESS
ADDRESS

IN PRESENCE OF WITNESS

PRINCIPAL - INDIVIDUAL/PARTNER - SIGNATURE

1. _____ AS TO 1. _____ (L.S.)

2. _____ (S-74) AS TO 2. _____ (L.S.)

CORPORATE PRINCIPALSTATE IN WHICH INCORPORATED
MichiganBUSINESS ADDRESS
**320 E. Seven Mile Road
Detroit, MI 48203**EXECUTE
CORPORATE CERTIFICATE
ON REVERSE SIDEOFFICER'S
SIGNATURE

TITLE

President - Fort Wayne

Certification

Brandon G. King

Estimating Mgr

AFFIX
CORPORATE
SEAL**CORPORATE SURETY**STATE IN WHICH INCORPORATED
MassachusettsBUSINESS ADDRESS
5600 New King Street, Suite 360, Troy, MI 48098

ATTEST:

OFFICER'S
SIGNATURE

TITLE

Michelle Buechel, Attorney-in-fact

AFFIX
CORPORATE
SEAL

INSTRUCTIONS

1. This form shall be used wherever a performance bond is required under the provisions of Act No. 351 of the Public Acts of Michigan for the year 1972, and the provisions of the City of Detroit Charter. There shall be no deviation from this form except as authorized by the Corporation Counsel of the City of Detroit.

2. The surety on the bond may be any corporation licensed by the State of Michigan to act as surety and satisfactory to the City of Detroit.

The full business name of the corporation surety, business address, and the name of the state in which incorporated shall be inserted in the space provided therefor. The bond shall be executed and attested under corporate seal as indicated on the form.

1. The principal shall be identified by inserting in the space provided therefor the following information according to the principal's legal status, and the bond executed by the principal in accordance with the following requirements.

Individual. The name including full Christian name, business or residence address, with the recital that the principal is an individual. The bond shall be signed by the individual on the line opposite the scroll seal (L.S.), using the same form of signature as used in the Contract, and the signature duly witnessed.

Individual Doing Business Under an Assumed Name. The name of the individual, business or residence address, with the recital that the

principal is doing business under an assumed or trade name, naming it. The bond shall be signed by the individual on the line opposite the scroll seal (L.S.), using the same form of signature as used in the Contract, and the signature duly witnessed.

Co-partnership. The names of the individual partners, their business address, with the recital that such individuals are partners composing a firm, naming it. The bond shall be signed on line opposite the scroll seal by the same partner who signed the Contract, using the same form of signature, and the signature duly witnessed.

Corporation. The full business name of the corporation, business address, with the recital that the principal is a corporation, and the name of the state in which incorporated. The bond shall be signed by an authorized officer of the corporation, followed by his title, and the corporate seal affixed.

The official character and authority of the person executing the bond for the corporation shall be certified by the secretary or assistant secretary, according to the Certificate provided below. In lieu of such certificate there may be attached to the bond copies of so much of the records of the corporation as will show the official character and authority of the officer signing, duly certified by the secretary, under the corporate seal, to be true copies.

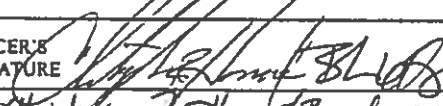
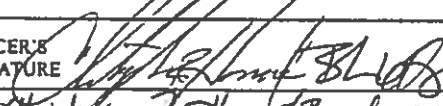
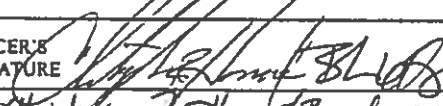
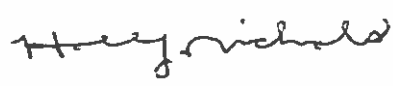



4. The date of this bond must not be prior to the date of instrument in connection with which it is given.

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, Stephen M. Wallace, certify that I am the President of Leap Secretary Corp. Secretary, Of the corporation named as principal within the bond; that Christopher M. Wallace/Brandon G. King

Who signed the said bond on behalf of the principal, was then President/Executive Manager of said corporation; that I know his signature, and his signature thereto is genuine, and that said bond was duly signed and the corporate seal affixed for and in behalf of said corporation by authority of its governing body.

C of D-171-BO (Rev. 5-74)

PAYMENT BOND (See Instructions on Reverse Side)	CONTRACT NO. PW- 6972 CPO NO: 2913189			
Bond No. 013127448				
PRINCIPAL (Name, and legal status) Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., a joint venture	DATE OF CONTRACT			
SURETY Liberty Mutual Insurance Company	DATE BOND EXECUTED			
AMOUNT OF BOND (Express in words and figures) THREE MILLION, EIGHT HUNDRED SIXTY-EIGHT THOUSAND, FOUR HUNDRED SIXTY AND 92/100 DOLLARS \$3,868,460.92				
<p>KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL and SURETY above named, are held and firmly bond unto the City of Detroit, Michigan, a municipal corporation, hereinafter called the City, in the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.</p> <p>THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the City, numbered and dated as shown above and hereto attached, and which shall be deemed a part hereof as fully as if set out herein.</p> <p>AND WHEREAS, This bond is given in compliance with and subject to the provisions of Act No. 351 of the Public Acts of Michigan, for the year 1972, and the provisions of the City of Detroit Charter.</p> <p>NOW, THEREFORE, if the principal shall well and promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.</p> <p>IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.</p>				
PRINCIPAL: <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> DOING BUSINESS UNDER ASSUMED NAME <input type="checkbox"/> PARTNERSHIP				
NAMES OF ALL PARTNERS IN PRESENCE OF WITNESS	BUSINESS ADDRESS PRINCIPAL - INDIVIDUAL/PARTNER - SIGNATURE			
1. _____ AS TO 1. _____ (L.S.) 2. _____ (S-74) AS TO 2. _____ (L.S.)				
CORPORATE PRINCIPAL				
STATE IN WHICH INCORPORATED Michigan	BUSINESS ADDRESS 320 E. SEVEN MILE ROAD DETROIT, MI 48203			
EXECUTE CORPORATE CERTIFICATE ON REVERSE SIDE	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;"> OFFICER'S SIGNATURE  </td> <td rowspan="2" style="width: 40%; vertical-align: middle; text-align: center;"> AFFIX CORPORATE SEAL </td> </tr> <tr> <td> TITLE Christopher R. Horvath / Brandon G. King President - Fort Wayne Contracting / Estimating Mgr </td> </tr> </table>	OFFICER'S SIGNATURE 	AFFIX CORPORATE SEAL	TITLE Christopher R. Horvath / Brandon G. King President - Fort Wayne Contracting / Estimating Mgr
OFFICER'S SIGNATURE 	AFFIX CORPORATE SEAL			
TITLE Christopher R. Horvath / Brandon G. King President - Fort Wayne Contracting / Estimating Mgr				
CORPORATE SURETY				
STATE IN WHICH INCORPORATED Massachusetts	BUSINESS ADDRESS 5600 New King Street, Suite 360, Troy, MI 48098			
ATTEST 	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;"> OFFICER'S SIGNATURE  </td> <td rowspan="2" style="width: 40%; vertical-align: middle; text-align: center;"> AFFIX CORPORATE SEAL </td> </tr> <tr> <td> TITLE Michelle Buechel, Attorney-in-fact </td> </tr> </table>	OFFICER'S SIGNATURE 	AFFIX CORPORATE SEAL	TITLE Michelle Buechel, Attorney-in-fact
OFFICER'S SIGNATURE 	AFFIX CORPORATE SEAL			
TITLE Michelle Buechel, Attorney-in-fact				

INSTRUCTIONS

principal is doing business under an assumed or trade name, naming it. The bond shall be signed by the individual on the line opposite the scroll seal (L.S.), using the same form of signature as used in the Contract, and the signature duly witnessed.

Co-partnership. The names of the individual partners, their business address, with the recital that such individuals are partners composing a firm, naming it. The bond shall be signed on line opposite the scroll seal by the same partner who signed the Contract, using the same form of signature, and the signature duly witnessed.

Corporation. The full business name of the corporation, business address, with the recital that the principal is a corporation, and the name of the state in which incorporated. The bond shall be signed by an authorized officer of the corporation, followed by his title, and the corporate seal affixed.

The official character and authority of the person executing the bond for the corporation shall be certified by the secretary or assistant secretary, according to the Certificate provided below. In lieu of such certificate there may be attached to the bond copies of so much of the records of the corporation as will show the official character and authority of the officer signing, duly certified by the secretary, under the corporate seal, to be true copies.

4. The date of this bond must not be prior to the date of instrument in connection with which it is given.

1. This form shall be used wherever a Payment bond is required under the provisions of Act No. 351 of the Public Acts of Michigan for the year 1972, and the provisions of the City of Detroit Charter. There shall be no deviation from this form except as authorized by the Corporation Counsel of the City of Detroit.

2. The surety on the bond may be any corporation licensed by the State of Michigan to act as surety and satisfactory to the City of Detroit.

The full business name of the corporation surety, business address, and the name of the state in which incorporated shall be inserted in the space provided therefor. The bond shall be executed and attested under corporate seal as indicated on the form.

3. The principal shall be identified by inserting in the space provided therefor the following information according to the principal's legal status, and the bond executed by the principal in accordance with the following requirements.

Individual. The name including full Christian name, business or residence address, with the recital that the principal is an individual. The bond shall be signed by the individual on the line opposite the scroll seal (L.S.), using the same form of signature as used in the Contract, and the signature duly witnessed.

Individual Doing Business Under an Assumed Name. The name of the individual, business or residence address; with the recital that the

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, James A. Jacob, certify that I am the President Corp. Secretary Corp. Secretary of the corporation named as principal within the bond; that Christopher R. Horvath / President G. King

Who signed the said bond on behalf of the principal, was then President / Estimating Manager of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed and the corporate seal affixed for and in behalf of said corporation by authority of its governing body.

C of D-170-BO (Rev. 5-74)

7/21/15
updated

Supplier Response Form

Equalization Eligibility Form

In accordance with Ordinance No. 15-00, any Detroit-based firm shall be deemed a better bid than the bid of any competing firm which is not Detroit-based, whenever the bid of such competing firm shall be equal to or higher than the bid of the Detroit-based firm after the appropriate equalization percentage credit from the Equalization Allowance Table has been applied to the bid of the Detroit-based firm. **NOTE: IT IS THE VENDOR'S RESPONSIBILITY TO COMPLETE THIS FORM. PROVIDE ALL NECESSARY DOCUMENTATION AND RETURN IT WITH YOUR BID. FAILURE TO DO SO WILL RESULT IN EQUALIZATION NOT BEING APPLIED.**

Company Name Fort Wayne Contracting, Inc. RFQ# 15AS067

Vendor qualifies for equalization credit as per section 10-5-2 of the purchasing ordinance as follows:

Vendor to check all categories which apply:

- ☒ Detroit Based Business as certified by the City of Detroit Human Rights Department prior to bid due date. Proof of certification must be submitted with each and every bid response.
- ☒ Detroit Based Business with Headquarters in Detroit as certified by the Human Rights Department prior to bid due date. Proof of certification must be submitted with each and every bid response.
- ☒ Detroit Resident Business as certified by completion of the affidavit attached to bid documents. The affidavit must be completed and returned with each and every bid for consideration.
- ☒ Detroit Based Small Business as demonstrated by furnishing proof of certification to the City of Detroit Human Rights Department. Proof of certification must be submitted with each and every bid for consideration.
- ☐ Detroit Based Micro Business Concern as certified by completion of the affidavit attached to bid and proof of certification as a Detroit Based Business. The affidavit and certification must be completed and returned each and every bid for consideration.
- ☒ Joint Venture OR ☐ Mentor Venture (check one). One of the parties to the joint or mentor venture must be a certified Detroit Based Business prior to bid due date in order to receive equalization credit as a joint or mentor venture. Proof of certification of the City of Detroit Human Rights Department along with a copy of the joint or mentor venture agreement between the parties involved is required.

The information submitted to determine Equalization Eligibility is subject to verification and acceptance by the City. Should it be found that the vendor is not eligible to receive equalization credit, all notice applies. Should it be found that information submitted has been falsified the vendor may be placed in Default of the City for up to three years and/or other action of the City of Detroit Finance Department - Purchasing Division. If all respondents are certified Detroit Based, Table 1 does not apply.

TABLE 1

Equalization Allowance for Detroit-based business and/or Detroit Resident Business

DOLLAR VALUE	DETROIT BASED	DETROIT RESIDENT
Less than \$10,000	0%	0%
\$10,000 to \$25,000	2%	2%
\$25,000 to \$50,000	3%	3%
\$50,000 to \$100,000	4%	4%
\$100,000 or greater	5%	5%
Detroit Based Business w/ Headquarters in Detroit	0%	

Revised 11.17.14

PAGE 1 OF 3 - ALL PAGES MUST BE RETURNED WITH YOUR BID RESPONSE

TABLE II	
*Equalization allowance for Detroit Based Small Business, Detroit Based Micro Business, Joint Venture, Mentor/Venture	
Category	Equalization Percentage
Detroit Based Small Business	15%
Detroit Based Micro Business	25%
Joint Venture	25%
Mentor/Venture	25%

Formed 11/17/14

PAGE 2 OF 4 - ALL PAGES MUST BE RETURNED WITH YOUR BID RESPONSE

For Certified Business Register Organization – Include
copy of certification with Bid response

RFP# 15AS067

**AFFIDAVIT OF ELIGIBILITY FOR EQUALIZATION CREDIT
(Detroit Resident Business/Detroit Based Micro Business)**

**THIS AFFIDAVIT MUST BE COMPLETED, NOTARIZED AND
SUBMITTED WITH EACH AND EVERY BID RESPONSE FOR
CONSIDERATION**

The undersigned hereby swears or affirms that all statements made with respect to eligibility for the provision of goods and/or services on the applicable named vendor are true and correct to the best of my knowledge. The undersigned further attests that the information provided is valid as of the date of bid submission.

Instructions: This affidavit should be filled out by firms eligible to receive equalization credit as any of the following: 1) Detroit Resident Business; 2) Detroit Based Micro Business. Initial each section for which the firm is eligible to receive credit and provide any information the applicable section(s) requires. Make sure that the forms are filled out completely, notarized, and included with your bid response. **Note:** This is a two-page form. Both pages must be filled out completely.

Detroit Based Micro Business

Type of Business:

☐ Manufacturing ☐ Retail ☐ General Construction
☐ Wholesale ☐ Service

Number of Employees

Amount of Annual Gross Receipts \$

X Detroit Resident Business

Total number of persons employed by the firm (including all full-time & part-time owners, officers, managers, and support staff both professional & non-professional) is 16

Total number of employees who are residents of the City of Detroit is 9 Percentage of employees who are residents of the City of Detroit is 56%

The undersigned further swears or affirms that the following documents have been presented by all Detroit employees and will be maintained by the DRB vendor for a period of three (3) years upon completion of the contract bid upon: One (1) document from Group A or two (2) documents from Group B are to be submitted upon request by the City.

Group A: 1) Michigan Drivers License 2) Michigan ID Card 3) Prior Year City of Detroit Resident Income Tax Return
Group B: 1) W-4 Forms 2) Voter Registration Card 3) Current utility bill with the employee's name and Detroit street address indicated thereon 4) Affidavit from neighbor or other disinterested party.

**THIS AFFIDAVIT IS TWO PAGES
BOTH PAGES MUST BE COMPLETED IN
ORDER TO BE CONSIDERED FOR
EQUALIZATION CREDIT FOR CATEGORIES
REFERENCED ON THIS FORM**

PAGE 3 OF 4 - ALL PAGES MUST BE RETURNED WITH YOUR BID RESPONSE

REVISED 11.17.14

VENDORS REQUESTING EQUALIZATION CREDIT AS A DETROIT BASED MICRO BUSINESS MUST, IN ADDITION TO COMPLETING THIS AFFIDAVIT INCLUDE WITH THEIR BID RESPONSE PROOF OF CERTIFICATION AS A DETROIT BASED BUSINESS IN ORDER TO RECEIVE EQUALIZATION CREDIT A DETROIT BASED MICRO BUSINESS REFERENCED IN THIS PARAGRAPH.

Questions regarding certification should be directed to the City of Detroit Human Rights Department at 313 224 4505

The City reserves the right to verify information submitted and request additional documentation if it feels it is necessary to do so

The information submitted to substantiate Equalization Eligibility is subject verification and acceptance by the City. Should it be found that the vendor is not eligible to receive equalization credit it will not be applied. Should it be found that the information submitted has been falsified the vendor may be placed in default by the City for up to a three-year period at the discretion of the City of Detroit Finance Department-Purchasing Division

Print Name of Affiant: Christopher R. Honore

Signature of Affiant:

Christopher R. Honore

Company Name Fort Wayne Contracting, Inc.

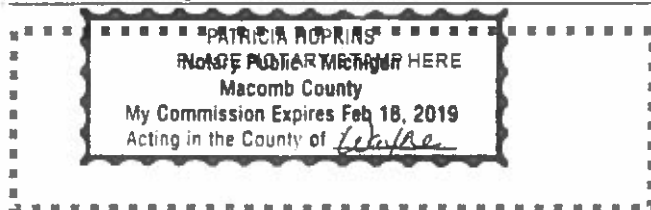
Subscribed and sworn before me this day July 27 2015
Month Date Year

Macomb County Michigan Commission Expiration Date 02 18 2019

Notary Signature:

Patricia Hopkins

Print Name of Notary: Patricia Hopkins



REVISED 11.17.14

PAGE 4 OF 4 - ALL PAGES MUST BE RETURNED WITH YOUR BID RESPONSE

Please enter your password below and click Save to update your response.

(See Electronic Signatures in Global and National Commerce Act for more information.)

To take exception:

- 1) Click Take Exception.
- 2) Create a Word document detailing your exceptions
- 3) Upload exceptions as an attachment to your offer on BidSync's system

Username patty@fortwaynecontracting.com

Password

Take Exception

Close

* Required fields

Detroit Business Certification Program

FY 2014 - 2015

Fort Wayne Contracting, Inc.

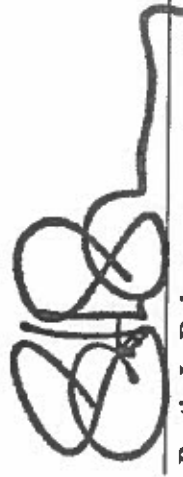
This acknowledges the above business has met all requirements set forth by
the Human Rights Department as

**Detroit Headquartered Business (DHB),
Detroit Small Business (DSB), and
Minority-Owned Business Enterprise (MBE)**

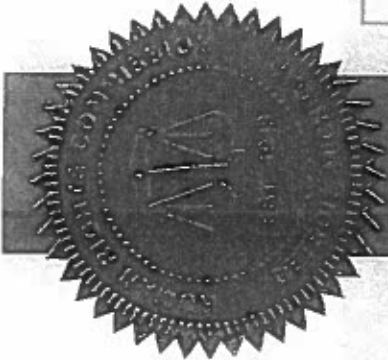
commencing **June 8, 2015** expiring on **June 8, 2016.**

City of Detroit
Michael E. Duggan, Mayor

Receipt Number: DBCP 14/15: RC042915-1793



Portia L. Roberson
Group Executive - Ethics & Civil Rights



SECTION II

S P E C I F I C A T I O N S

The Improvements covered by these plans are based on the Michigan Department of Transportation Local Agency Program Guidelines for Geometrics (3R) dated August 28, 2008. Except where otherwise indicated on these plans or in the Proposal and Supplemental Specifications contained therein, all materials and workmanship shall be in accordance with the Michigan Department of Transportation Standard Specifications for Construction, 2012 version and the Michigan Manual of Uniform Traffic Control Devices, 2009 edition.

SECTION III

DRAWINGS AND SPECIAL PROVISIONS

TITLE SHEET CITY OF DETROIT

**MAYOR
MIKE DUGGAN**

CONTROL SECTION:

DEPARTMENT OF PUBLIC WORK
RON BRUNDIGE, DIRECTOR
JOSE ABRAHAM, DEPUTY DIRECTOR

JOB NO.: CONTRACT PW-6972**CPO :****SPO :****LOCAL AGENCY:** City of Detroit, Wayne County

CONTRACT FOR: Approximately 3.6 miles of cold milling HMA surface, HMA resurfacing, concrete curb, sidewalk, curb ramps, HMA approaches, drainage structure adjustments, pavement removal and replacement, pavement markings and miscellaneous construction.

LOCATION:

W. GRAND BLVD: FROM WOODWARD TO LINWOOD
W. VERNOR: FROM MICHIGAN TO 17TH
W. VERNOR: FROM FISHER FREEWAY TO LIVERNOIS
W. VERNOR : FROM DIX TO CENTRAL

STANDARD PLANS

R-28-G	R-29-H	R-100- G
R-44-F		WZD-100-E*
R-83-B	R- 30-E	WZD-125-E*

*** Denotes Special Details**

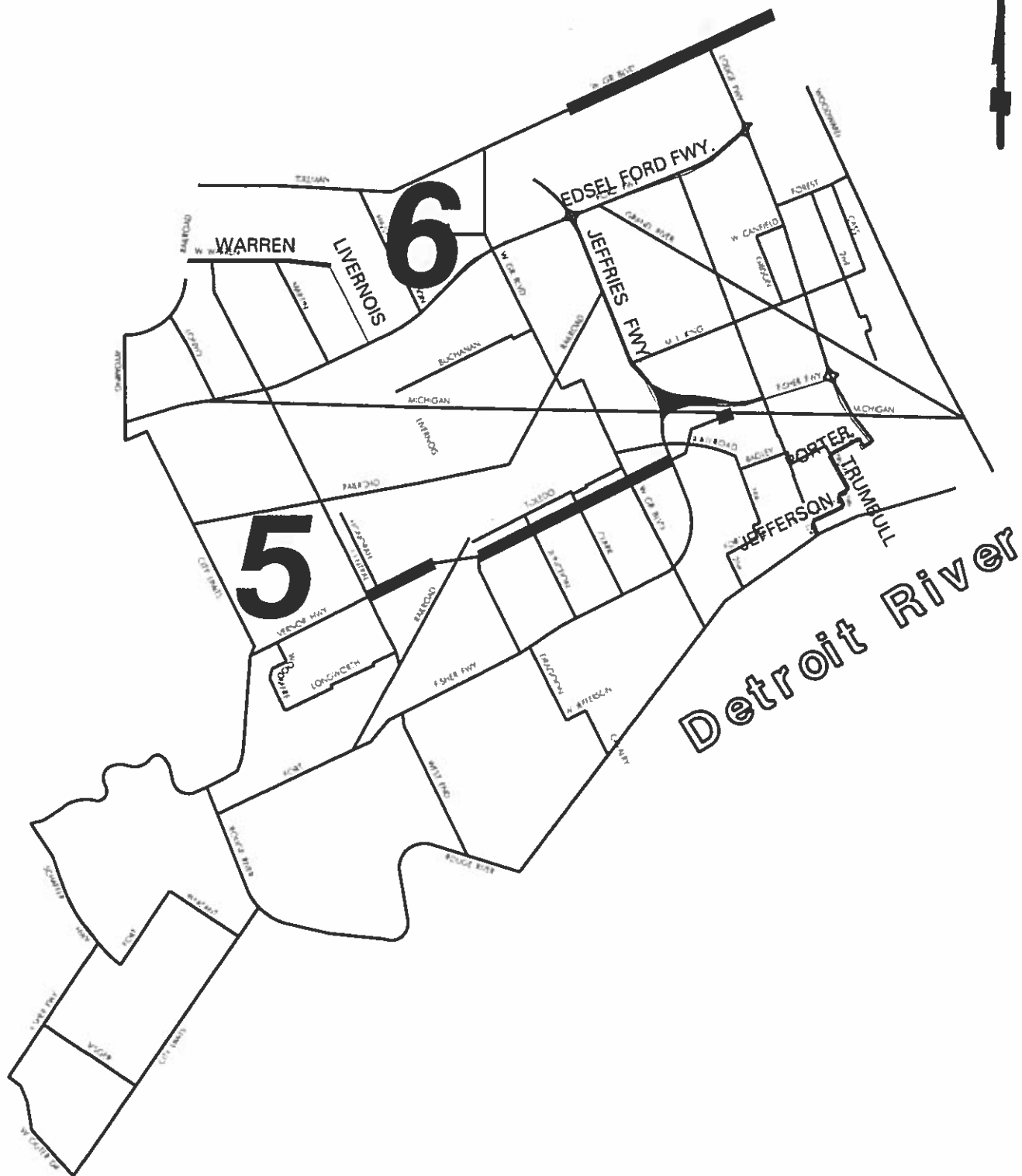
THE IMPROVEMENTS COVERED BY THESE PLANS ARE BASED ON THE MICHIGAN DEPARTMENT OF TRANSPORTATION LOCAL AGENCY PROGRAM GUIDE LINES FOR GEOMETRICS (3R) DATED AUGUST 28, 2008 EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED THEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2012 VERSION AND MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.

LOCAL AUTHORITY APPROVAL
CITY OF DETROIT
GOVERNMENTAL AGENCY

(SEAL)

APPROVED: Noel Y. Santos, P.E.
ENGINEER

MARCH 30, 2015
DATE



CONTRACT: PW-6972

SECTOR

1. W.GRAND BLVD :WOODWARD TO LINWOOD
2. W.VERNOR :MICHIGAN TO 17TH
3. W.VERNOR :FISHER FWY.TO LVERNOIS
4. W.VERNOR :DIX TO CENTRAL

6
5
5
5

W. GRAND BLVD. LINWOOD TO WOODWARD AVE.

TRAFFIC DATA:**PRESENT: 12,780****FUTURE: 14,058****COMMERCIAL: 3%****POSTED SPEED: 30 MPH**

TYPE OF PAVEMENT	ASPHALT OVER CONCRETE	
LENGTH		7,824 FEET
PAVEMENT WIDTH		50..115..89 FEET (VARIES)

SCHEDULE OF ITEMS**PAGE 1 OF 2****LOCATION: W. GRAND BLVD: LINWOOD TO WOODWARD****LENGTH: 7,824 FT WIDTH : 50... 115...89 FT VARIES****WORK TYPE:** Cold Milling, HMA Resurfacing, Concrete Curb, Sidewalk, Driveway Approach, Drainage Improvements and Misc Construction

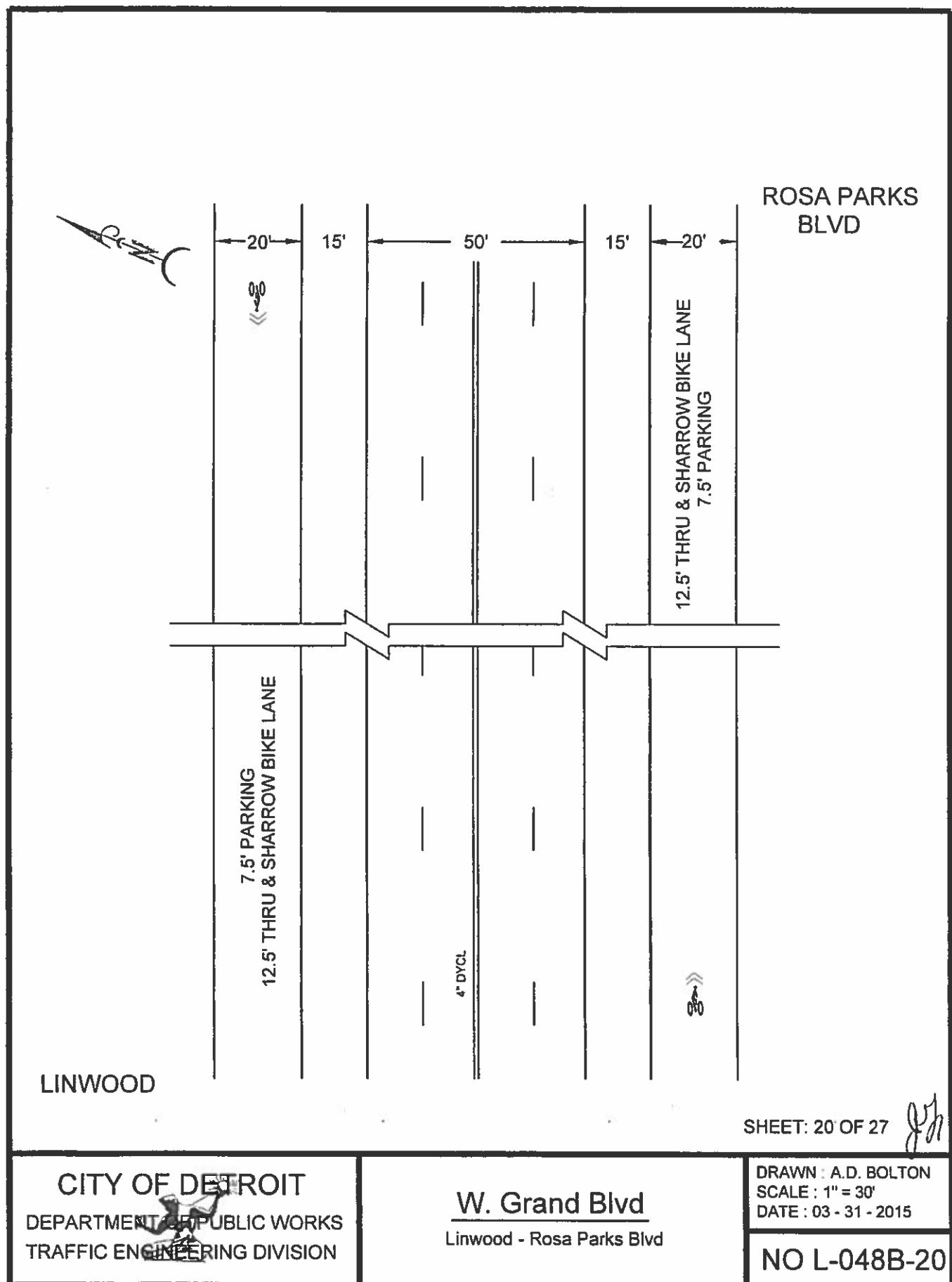
Description of Work	Estimated Quantity	Item Unit
Mobilization, Max. _____	0	LS
**Sidewalk, Rem	2,540	Syd
**Curb, Rem, Modified	1,625	Ft
**Integral Curb and Sidewalk, 2 Feet, Rem, Modified	1,230	Ft
Pavt, Rem	62	Syd
Excavation, Earth, Modified	20	Cyd
Granular Material, CI II	15	Cyd
Aggregate Base, 4 inch	7	Syd
Sewer Cleanout, Modified	1,220	Ft
Dr Structure Cover, Modified	60,732	Lb
Catch Basin A, Modified	1	Ea
Catch Basin BT, Modified	1	Ea
Dr Structure Cleaning, Modified	122	Ea
Dr Structure Cover, Adj, Case 1, Modified	231	Ea
Dr Structure Cover, Adj, Case 2, Modified	9	Ea
Reconstructing Dr Structure, Case 1, Modified	12	Ea
Reconstructing Dr Structure, Case 2, Modified	0	Ea
Pavt for Butt Joints, Rem	1,811	Syd
Hand Patching	5	Ton
HMA, 4E3	8,154	Ton
HMA, 5E3	6,115	Ton
Cold Milling HMA Surface, Modified	74,124	Syd
HMA Surface, Rem	6,509	Syd
Conditioning Existing Pavement, Modified	999	Ton
HMA Approach, Modified	1,253	Ton
HMA Shoulder, Modified	84	Ton
Pavt, Cleaning	0	LS
Conc Pavt , Misc, Nonreinf, 6 inch, Modified	0	Syd
Conc Pavt , Misc, Nonreinf, 8 inch, Modified	62	Syd
Pavt Repr, Nonreinf Conc, 10 inch, Modified	7	Syd
Cement	2	Ton
**Curb, Conc, Detail CD, Modified	1,595	Ft

** Estimated quantities for use at the discretion of the Engineer and subject to the Bureau Chief's or Head Engineer's approval during construction.

SCHEDULE OF ITEMS (continued)**PAGE 2 OF 2****LOCATION: W. GRAND BLVD: LINWOOD TO WOODWARD****LENGTH: 7,824 FT WIDTH : 50... 115...89 FT VARIES****WORK TYPE: Cold Milling, HMA Resurfacing, Concrete Curb, Sidewalk, Driveway Approaches, Drainage Improvements and Misc Construction**

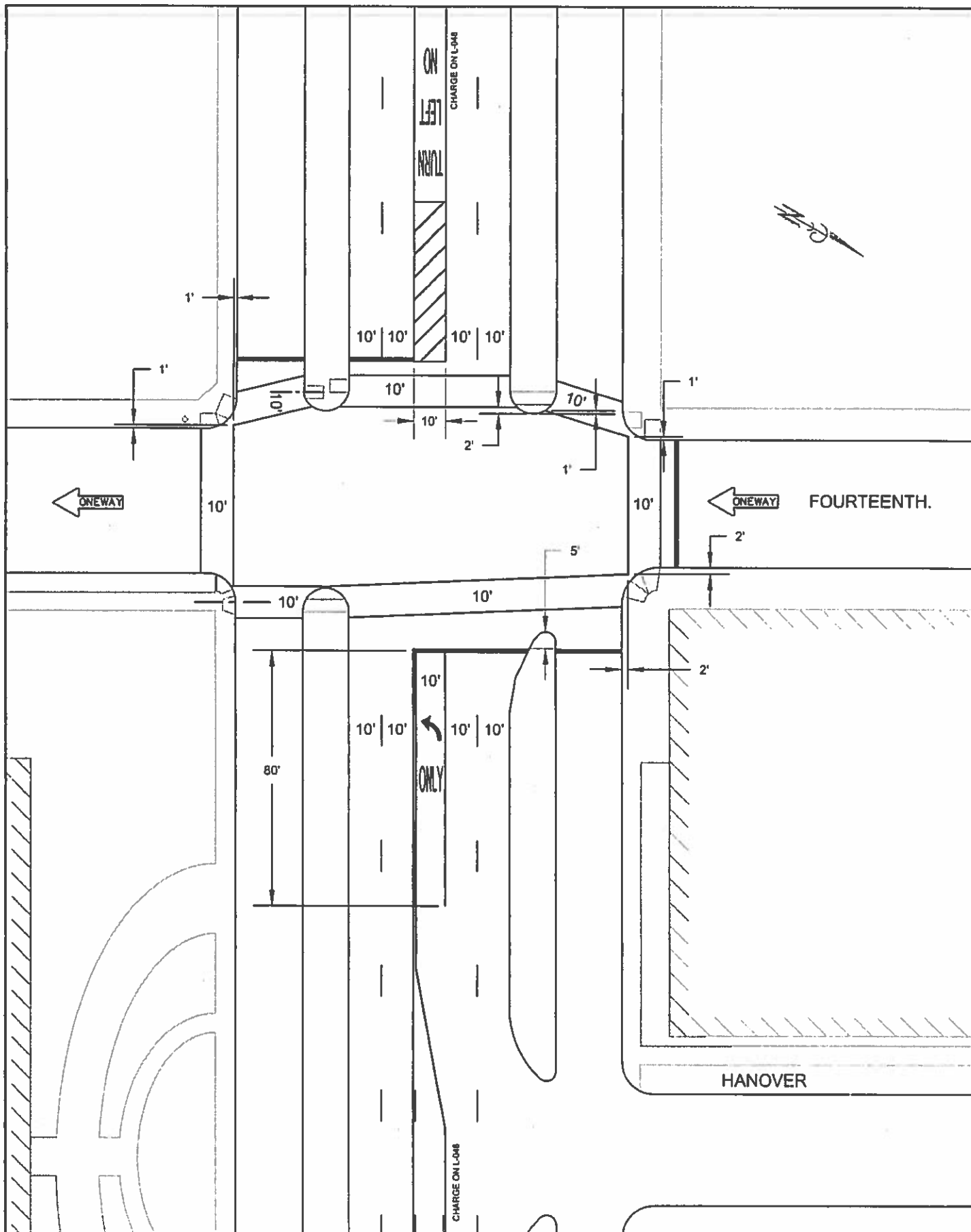
Description of Work	Estimated Quantity	Item Unit
Pavt Repr, Rem, Modified	7	Syd
**Integral Curb and Sidewalk, 2 Feet, Modified	1,230	Ft
Sidewalk, Conc with Tree Roots, 4 inch, Modified	684	Sft
Sidewalk, Conc with Tree Roots, 6 inch, Modified	108	Sft
Detectable Warning Surface Tiles, Modified	156	Ft
Sidewalk Ramp, ADA, Modified	12,312	Sft
Sidewalk, Conc, 4 inch, Modified	9,504	Sft
**Sidewalk, Conc, 6 inch, Modified	252	Sft
Pavt Mrkg, Ovly Cold Plastic, 18 inch, Stop Bar	841	Ft
Pavt Mrkg, Ovly Cold Plastic, 6 inch, Crosswalk	2,576	Ft
Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk	870	Ft
Pavt Mrkg, Ovly Cold Plastic, Only	14	Ea
Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	5	Ea
Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	9	Ea
Pavt Mrkg, Sprayable Thermopl, 4 inch, White	10,715	Ft
Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow	6,750	Ft
Pavt Mrkg, Modified Urethane, 6 inch, Cross Hatching, Yellow	240	Ft
Pavt Mrkg, Modified Urethane, 6 inch, Cross Hatching, White	606	Ft
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	4	Ea
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	4	Ea
Traffic Regulator Control	0	LS
Lighted Arrow, Type C, Furn	2	Ea
Lighted Arrow, Type C, Oper	2	Ea
Minor Traf Devices	0	LS
Pavt Mrkg, Type NR, Paint, 4 inch, White, Temp	0	Ft
Pavt Mrkg, Type NR, Paint, 4 inch, Yellow, Temp	0	Ft
Plastic Drum, High Intensity, Furn	156	Ea
Plastic Drum, High Intensity, Oper	156	Ea
Sign, Type B, Temp, Prismatic, Furn	400	Sft
Sign, Type B, Temp, Prismatic, Oper	400	Sft
Hydroseeding, Modified	50	Syd
Topsoil Surface, Furn, LM, Modified	4	Cyd
Water, Shutoff, Adj, Modified	18	Unit
Recessing Pavement Markings, 6 inch	4,385	Ft
Pavt Mrkg, Sprayable Thermopl, 6 inch, Crosswalk	1,809	Ft
Pavt Mrkg, Sprayable Thermopl, 12 inch, Crosswalk	0	Ft
Pavt Mrkg, Sprayable Thermopl, 18 inch, Stop Bar	520	Ft
Pavt Mrkg, Sprayable Thermopl, 24 inch, Stop Bar	0	Ft
Pavt Mrkg, Sprayable Thermopl, 6 inch, White	2,852	Ft
Pavt Mrkg, Waterborne, Bike Sym and Arrow, White	9	Ea
Pavt Mrkg, Waterborne, Bike Sharrow Sym, White	37	Ea
Recessing Pavement Markings, 12 inch	870	Ft
Recessing Pavement Markings, 18 inch	1,361	Ft
Pavt Mrkg, Ovly Cold Plastic, Thru Arrow Sym	0	Ea



**CITY OF DETROIT**DEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING DIVISION**W. Grand Blvd**

Linwood - Rosa Parks Blvd

DRAWN : A.D. BOLTON
SCALE : 1" = 30'
DATE : 03 - 31 - 2015**NO L-048B-20**



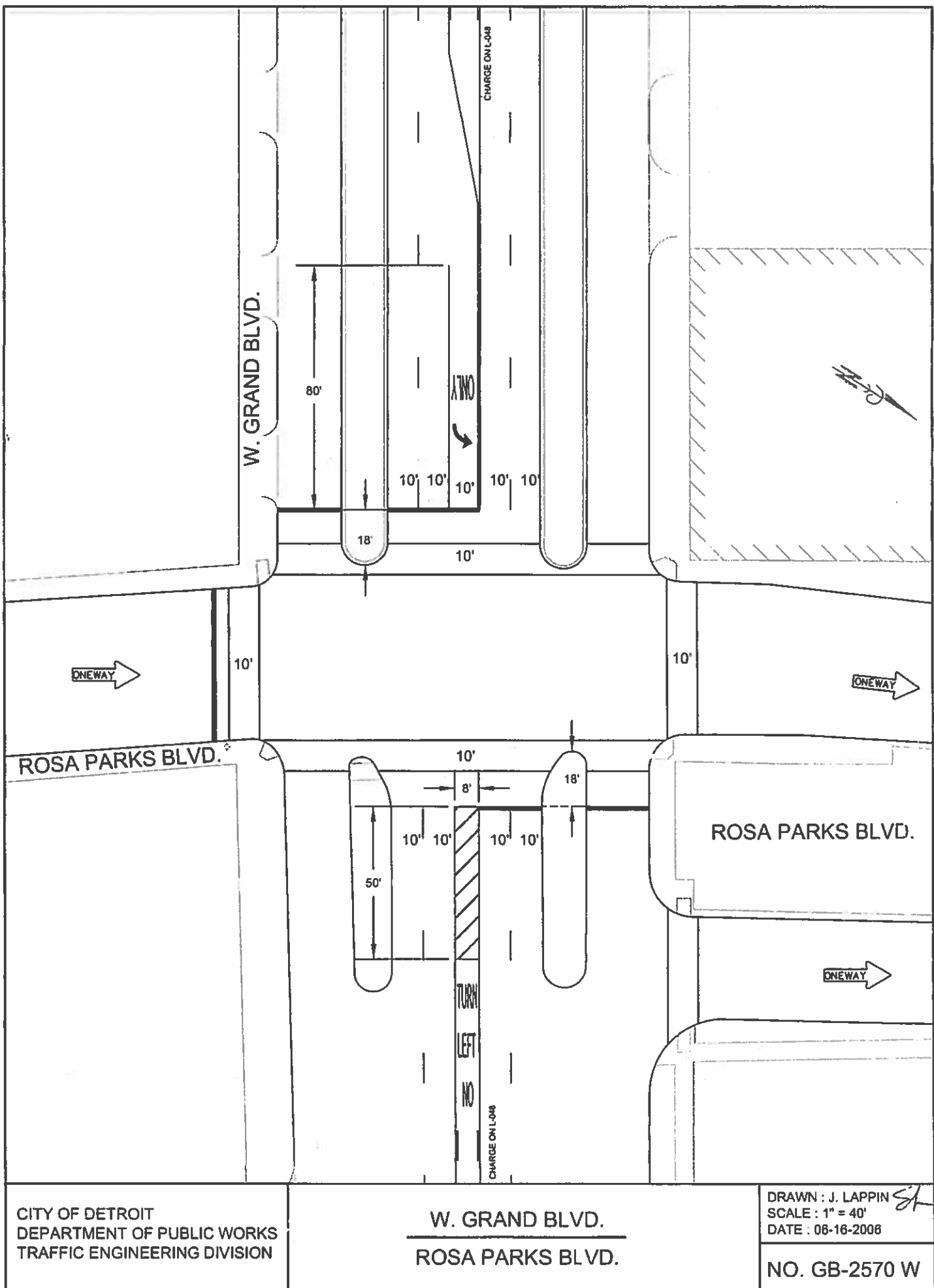
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING DIVISION

FOURTEENTH.
W. GRAND BLVD.

DRAWN : J. LAPPIN
SCALE : 1" = 40'
DATE : 06-16-2006

NO. GB-2464 W

F:\LAPIN\mapping\GB-2570\W Grand Blvd-Rosa Parks.dwg, 8/30/2006 10:17:40 AM, HP LaserJet 5000 Series PCL (draft), 1:480



CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING DIVISION

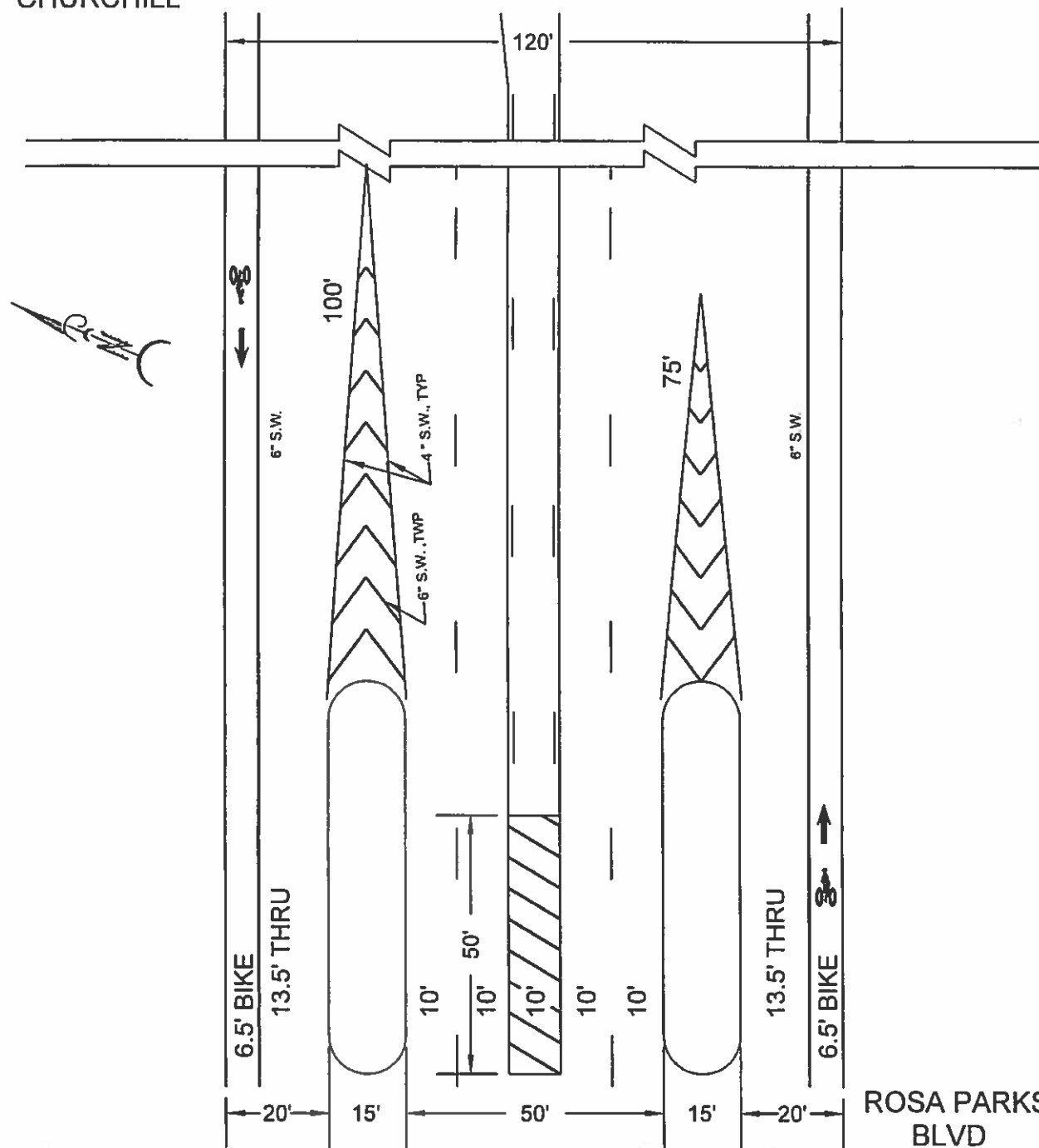
W. GRAND BLVD.
ROSA PARKS BLVD.

DRAWN : J. LAPPIN
SCALE : 1" = 40'
DATE : 06-16-2006

NO. GB-2570 W

CHURCHILL

HOLDEN



SHEET: 21 OF 27

CITY OF DETROIT

DEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING DIVISION

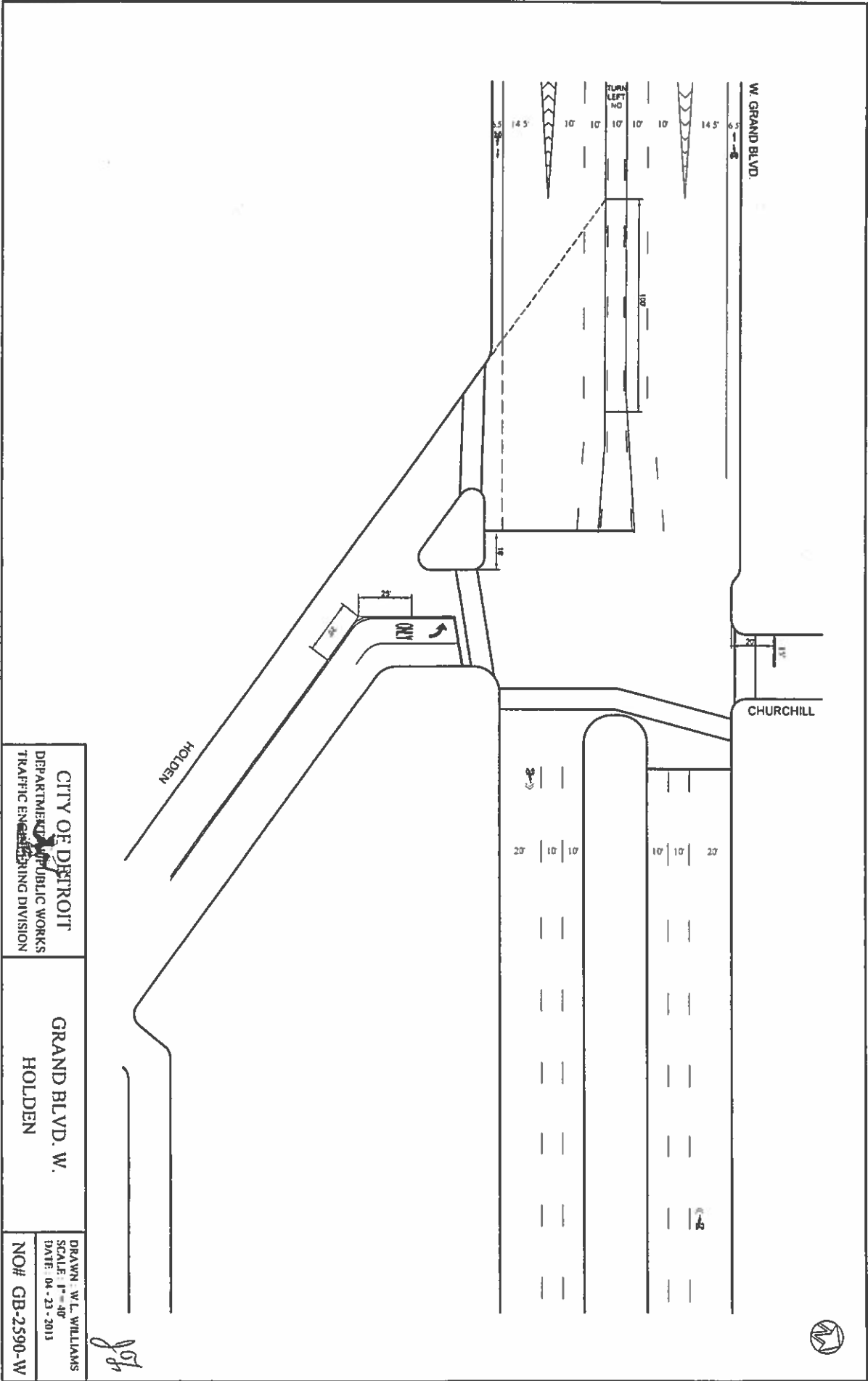
W. Grand Blvd

Rosa Parks Blvd - Holden/Churchill

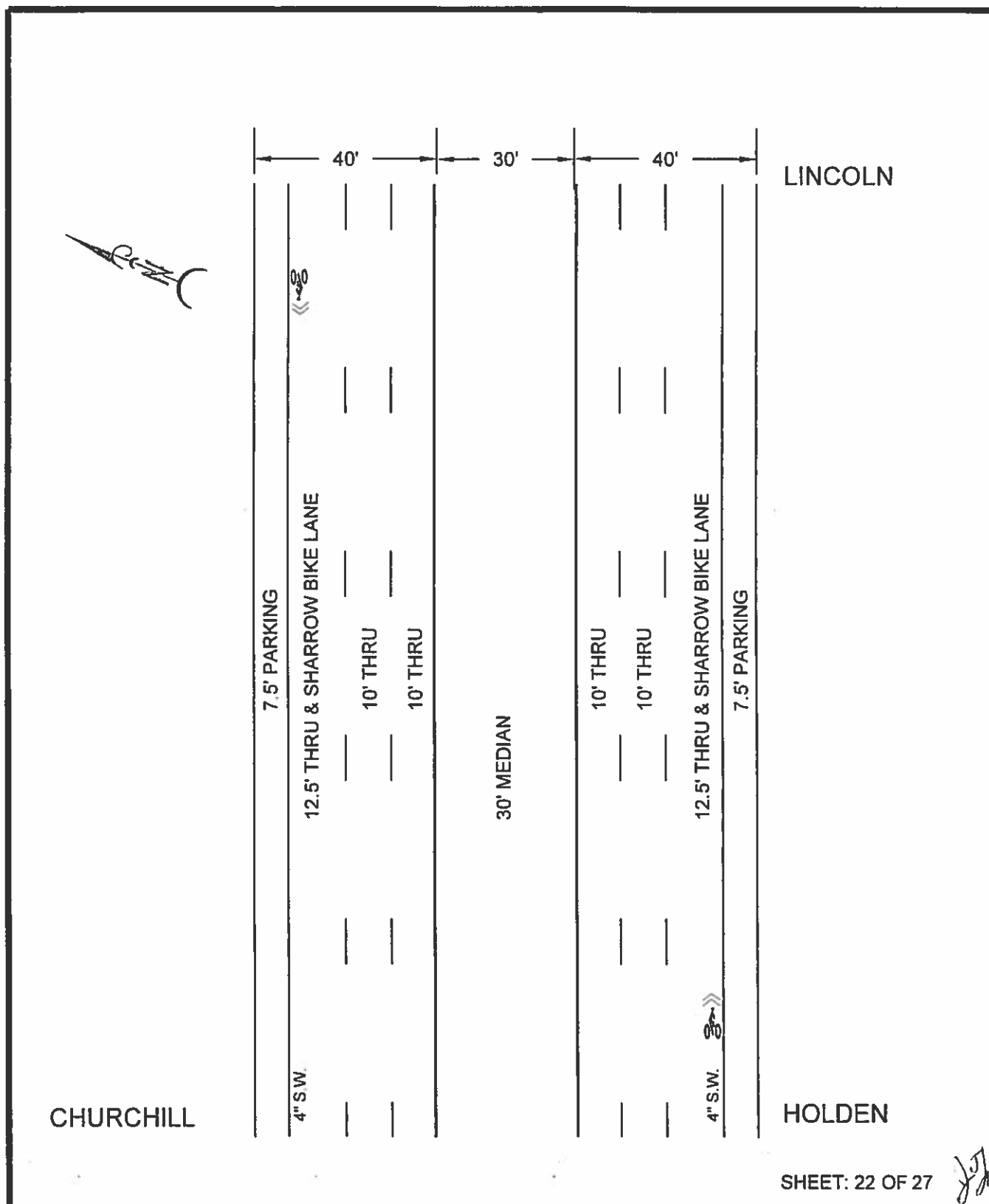
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SCALE : 1" = 30'
DATE : 03 - 31 - 2015

NO L-048B-21

REVISED 04/08/08 17/18



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SHEET: 22 OF 27

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CITY OF DETROIT

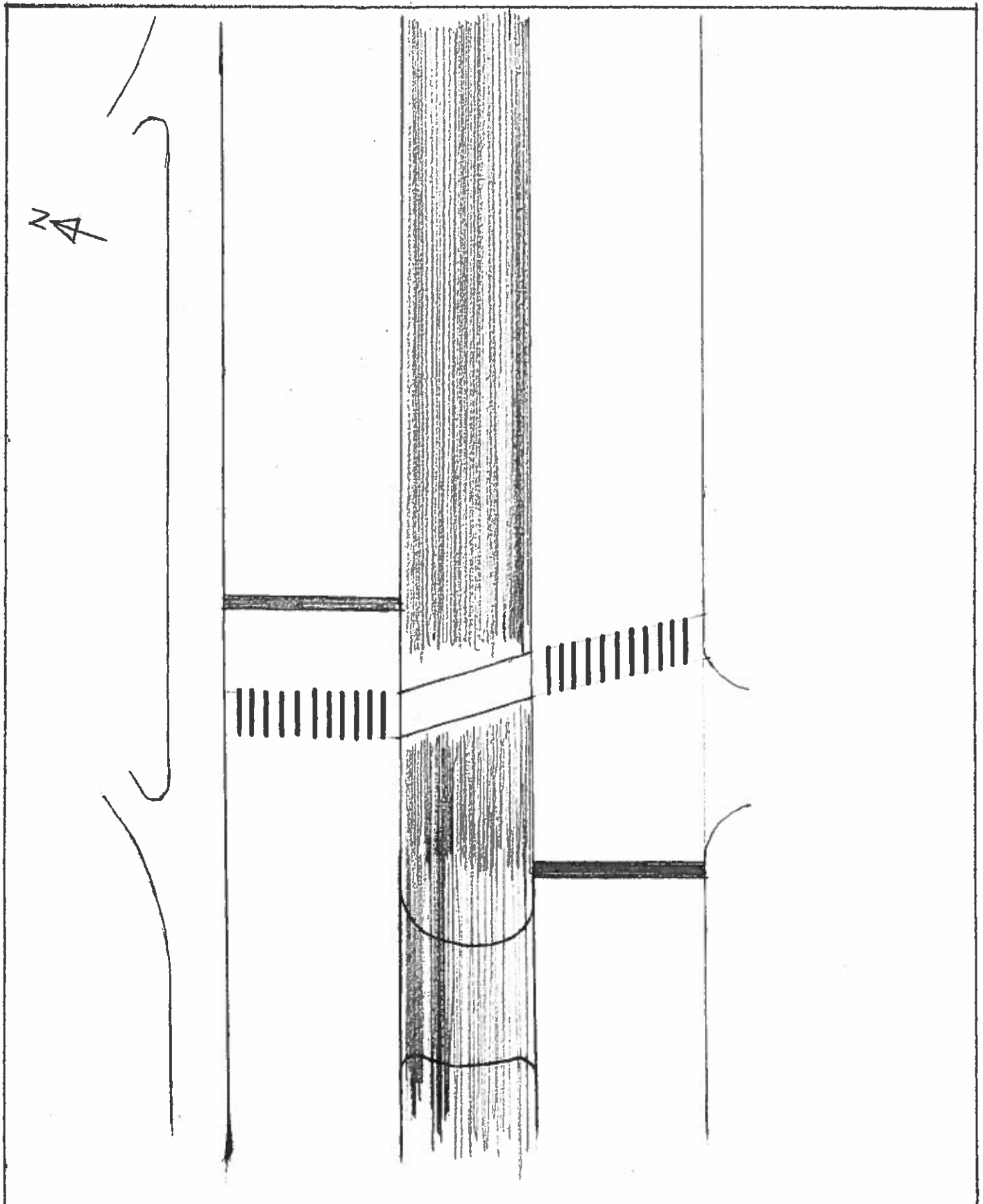
DEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING DIVISION

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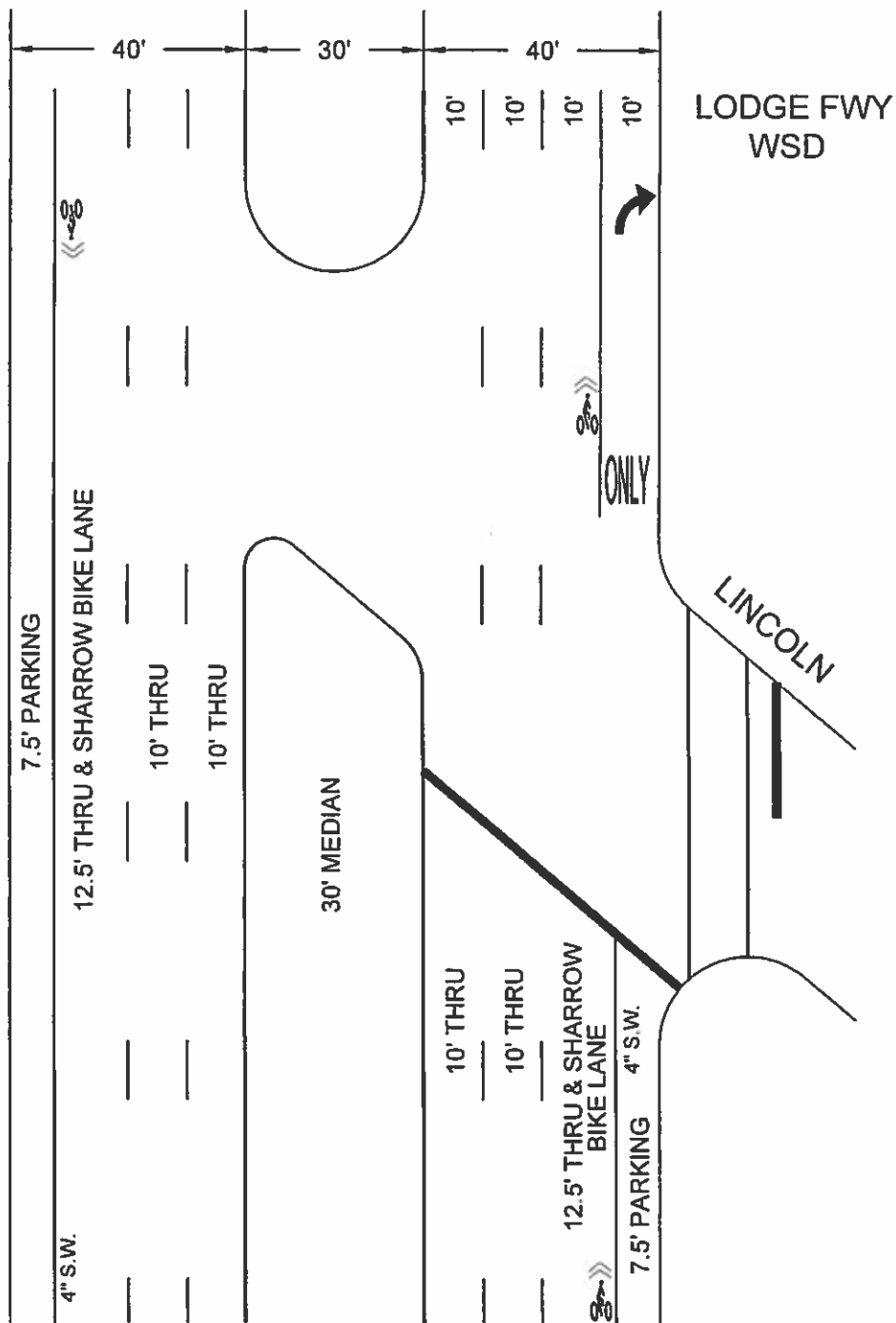
HOLDEN/CHURCHILL - LINCOLN

DRAWN : A.D. BOLTON
SCALE : 1" = 30'
DATE : 03 - 31 - 2015

NO L-048B-22



<p>CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS TRAFFIC ENGINEERING DIVISION</p>	<p>GRAND BLVD W HENRY FORD HOSP MIDBLOCK</p>	<p>DRAWN: J P FLINT SCALE: 1"=30' DATE: 04-02-2015 NO. GB-02680W</p>
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SHEET: 23 OF 27

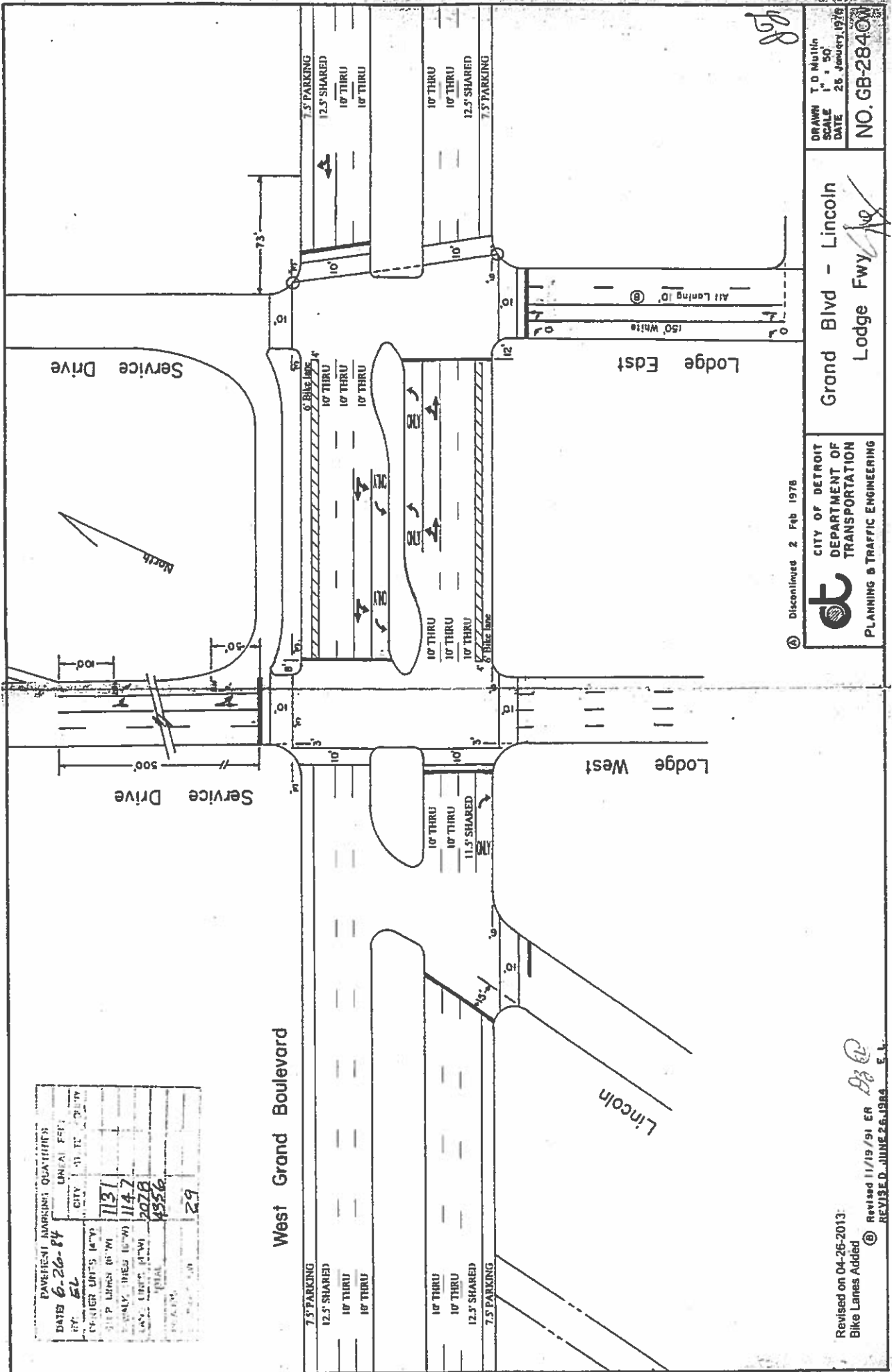
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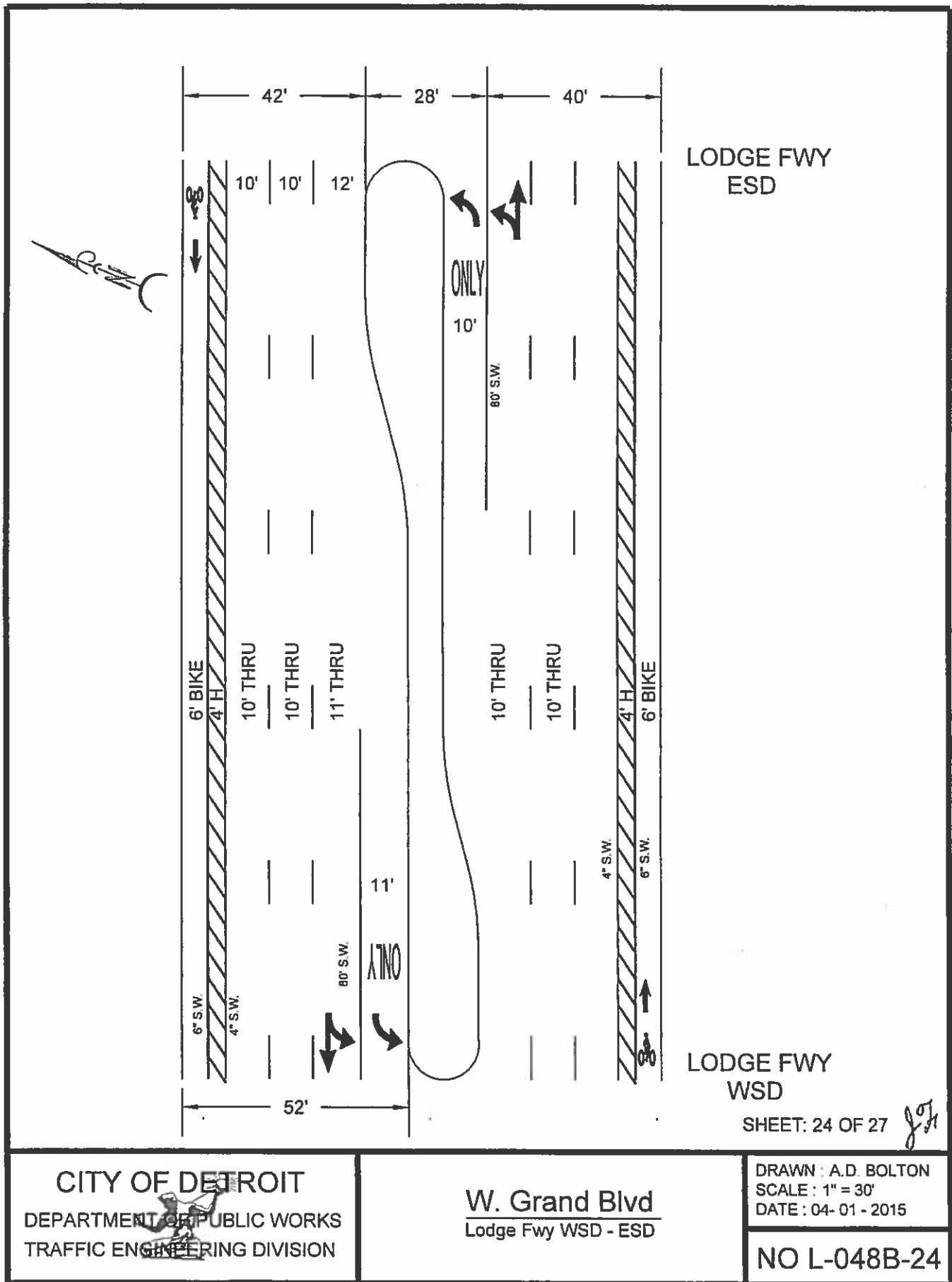
CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 TRAFFIC ENGINEERING DIVISION

W. Grand Blvd
 Lincoln - Lodge Fwy WSD

DRAWN: A.D. BOLTON
 SCALE: 1" = 30'
 DATE: 03-31-2015

NO L-048B-23





CITY OF DETROIT

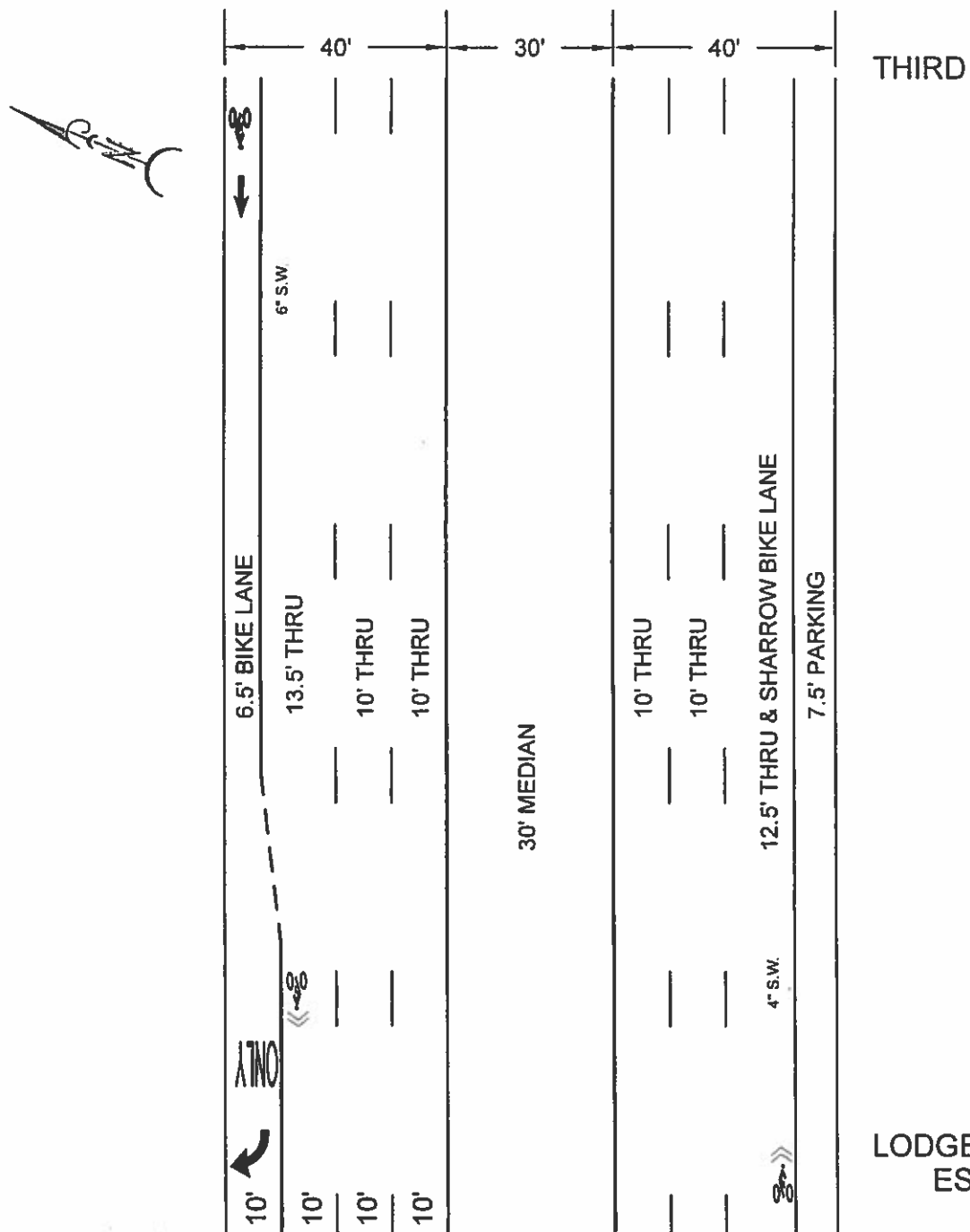
DEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING DIVISION

W. Grand Blvd

Lodge Fwy WSD - ESD

DRAWN: A.D. BOLTON
SCALE: 1" = 30'
DATE: 04-01-2015

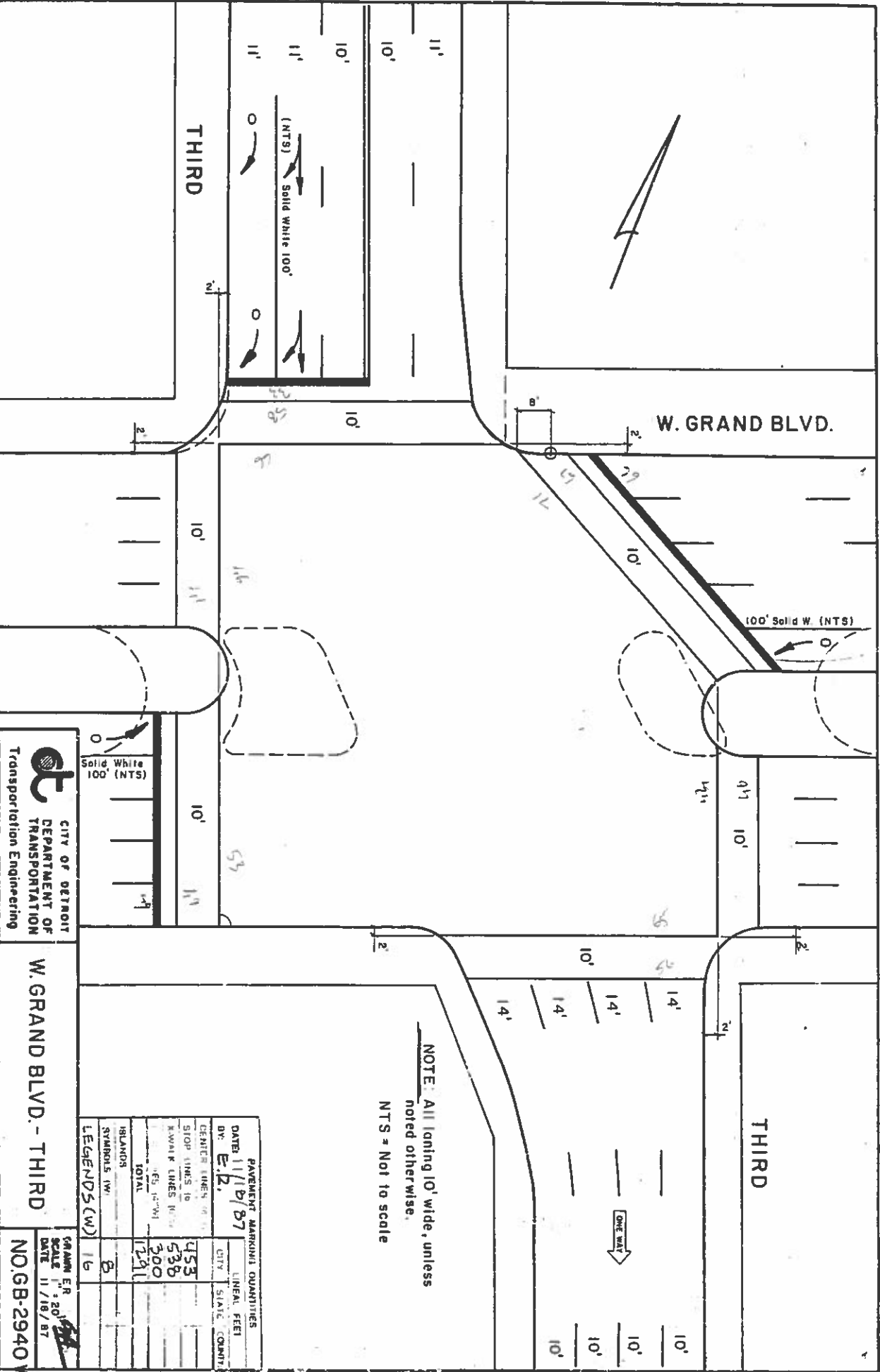
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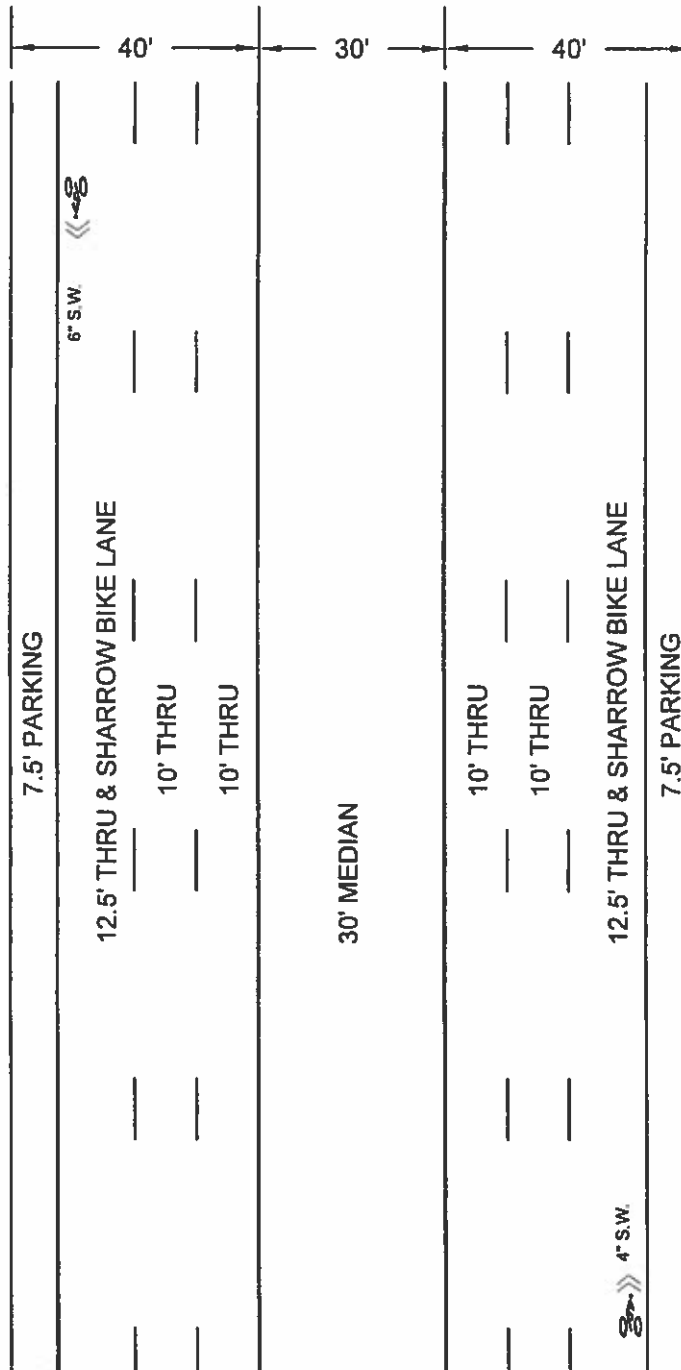


SHEET: 25a OF 27

CITY OF DETROITDEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING DIVISION**W. Grand Blvd**
Lodge Fwy ESD - THIRDDRAWN : A.D. BOLTON
SCALE : 1" = 30'
DATE : 03- 31 - 2015**NO L-048B-25A**

TELETYPE POST RECEIVED





SECOND

THIRD
SHEET: 25b OF 27

gob

CITY OF DETROIT

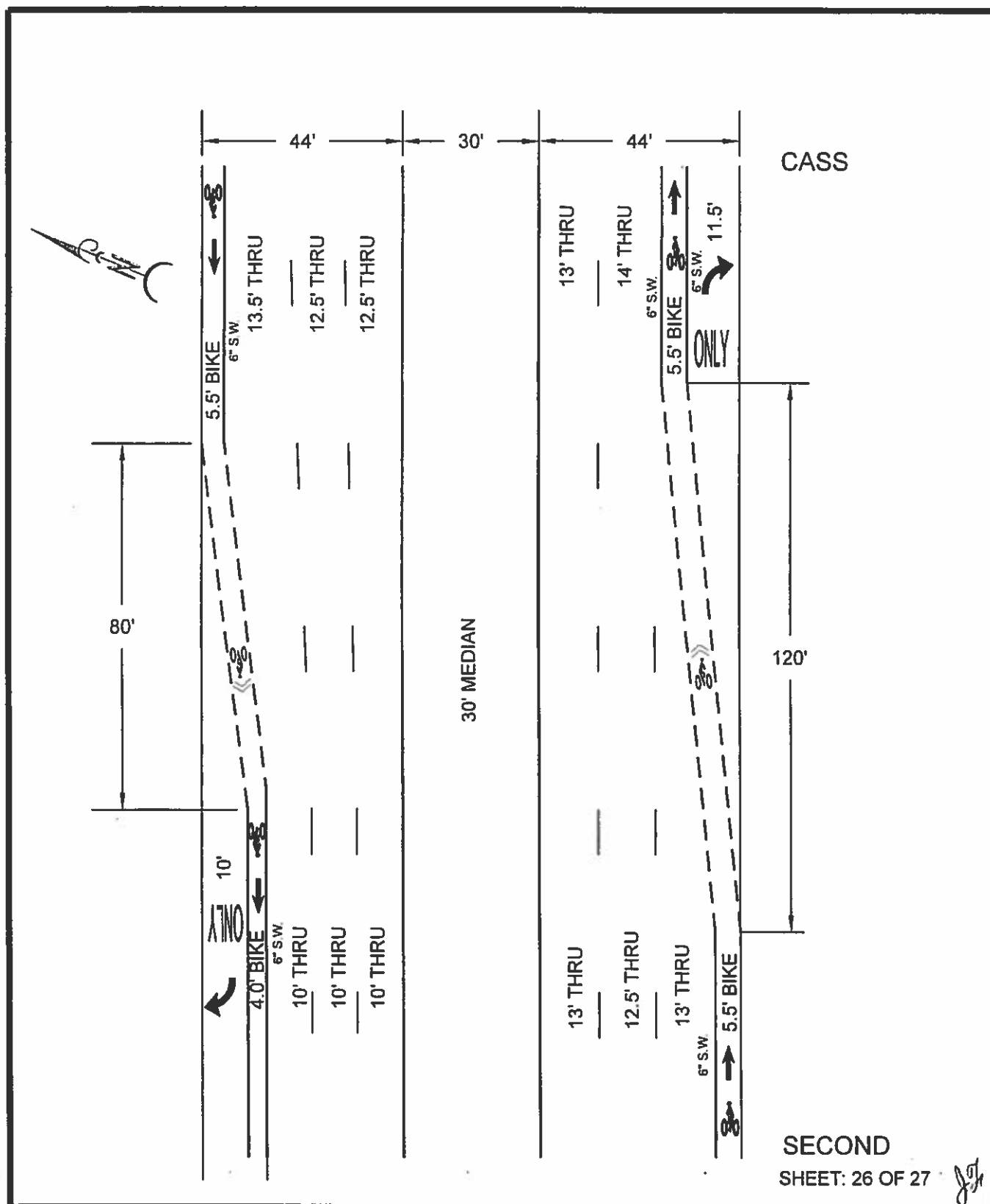
DEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING DIVISION

W. Grand Blvd

THIRD - SECOND

DRAWN : A.D. BOLTON
SCALE : 1" = 30'
DATE : 03- 31 - 2015

NO L-048B-25B



SECOND

SHEET: 26 OF 27

[Signature]

CITY OF DETROIT

DEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING DIVISION

W. Grand Blvd
SECOND - CASS

DRAWN : A.D. BOLTON
SCALE : 1" = 30'
DATE : 03- 31 - 2015

NO L-048B-26

W. GRAND BLVD.

CASS AVE.

DATE: 11/11/71

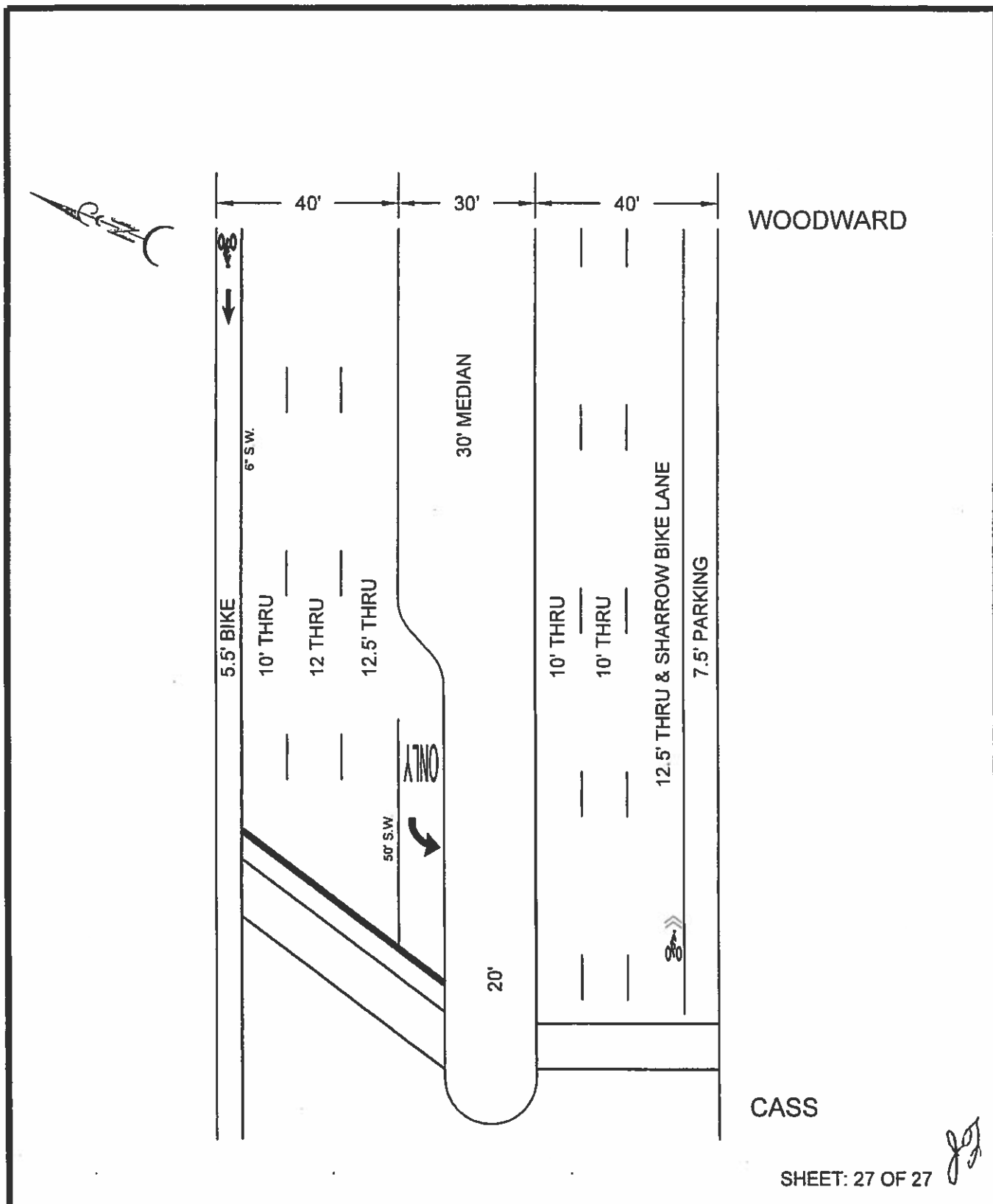


CITY OF DETROIT
DEPARTMENT OF
TRANSPORTATION
Transportation Engineering

CASS- W. GRAND BLVD.

DRAWN BY
SCALE 1" = 20'-0"
DATE 9/9/88

NO.GB-3060W



CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 TRAFFIC ENGINEERING DIVISION

W. Grand Blvd
 CASS - WOODWARD

DRAWN : A.D. BOLTON
 SCALE : 1" = 30'
 DATE : 04- 01 - 2015

NO L-048B-27

W. VERNOR

17TH ST.

TO

MICHIGAN AVE.

TRAFFIC DATA:**PRESENT: 2,143****FUTURE: 2,357****COMMERCIAL: 3%****POSTED SPEED: 30 MPH**

TYPE OF PAVEMENT	ASPHALT OVER CONCRETE	
LENGTH		1,418 FEET
PAVEMENT WIDTH		54..62..40 FEET (VARIES)

SCHEDULE OF ITEMS**PAGE 1 OF 2****LOCATION: W. VERNOR: 17TH TO MICHIGAN AVE.****LENGTH: 4140 FT WIDTH: 46 - 66 FT VARIES****WORK TYPE:** Cold Milling, HMA Resurfacing, Concrete Curb, Sidewalk, Driveway Approach, Drainage Improvements and Misc Construction

Description of Work	Estimated Quantity	Item Unit
Mobilization, Max. _____	0	LS
**Sidewalk, Rem	468	Syd
**Curb, Rem, Modified	618	Ft
**Integral Curb and Sidewalk, 2 Feet, Rem, Modified	0	Ft
Pavt, Rem	0	Syd
Excavation, Earth, Modified	20	Cyd
Granular Material, CI II	15	Cyd
Aggregate Base, 4 inch	0	Syd
Sewer Cleanout, Modified	130	Ft
Dr Structure Cover, Modified	4,579	Lb
Catch Basin A, Modified	1	Ea
Catch Basin BT, Modified	1	Ea
Dr Structure Cleaning, Modified	13	Ea
Dr Structure Cover, Adj, Case 1, Modified	17	Ea
Dr Structure Cover, Adj, Case 2, Modified	0	Ea
Reconstructing Dr Structure, Case 1, Modified	2	Ea
Reconstructing Dr Structure, Case 2, Modified	0	Ea
Pavt for Butt Joints, Rem	336	Syd
Hand Patching	5	Ton
HMA, 4E3	777	Ton
HMA, 5E3	583	Ton
Cold Milling HMA Surface, Modified	7,065	Syd
HMA Surface, Rem	448	Syd
Conditioning Existing Pavement, Modified	95	Ton
HMA Approach, Modified	86	Ton
HMA Shoulder, Modified	0	Ton
Pavt, Cleaning	0	LS
Conc Pavt , Misc, Nonreinf, 6 inch, Modified	0	Syd
Conc Pavt , Misc, Nonreinf, 8 inch, Modified	0	Syd
Pavt Repr, Nonreinf Conc, 10 inch, Modified	0	Syd
Cement	2	Ton
**Curb, Conc, Detail CD, Modified	2,352	Ft

** Estimated quantities for use at the discretion of the Engineer and subject to the Bureau Chief's or Head Engineer's approval during construction.

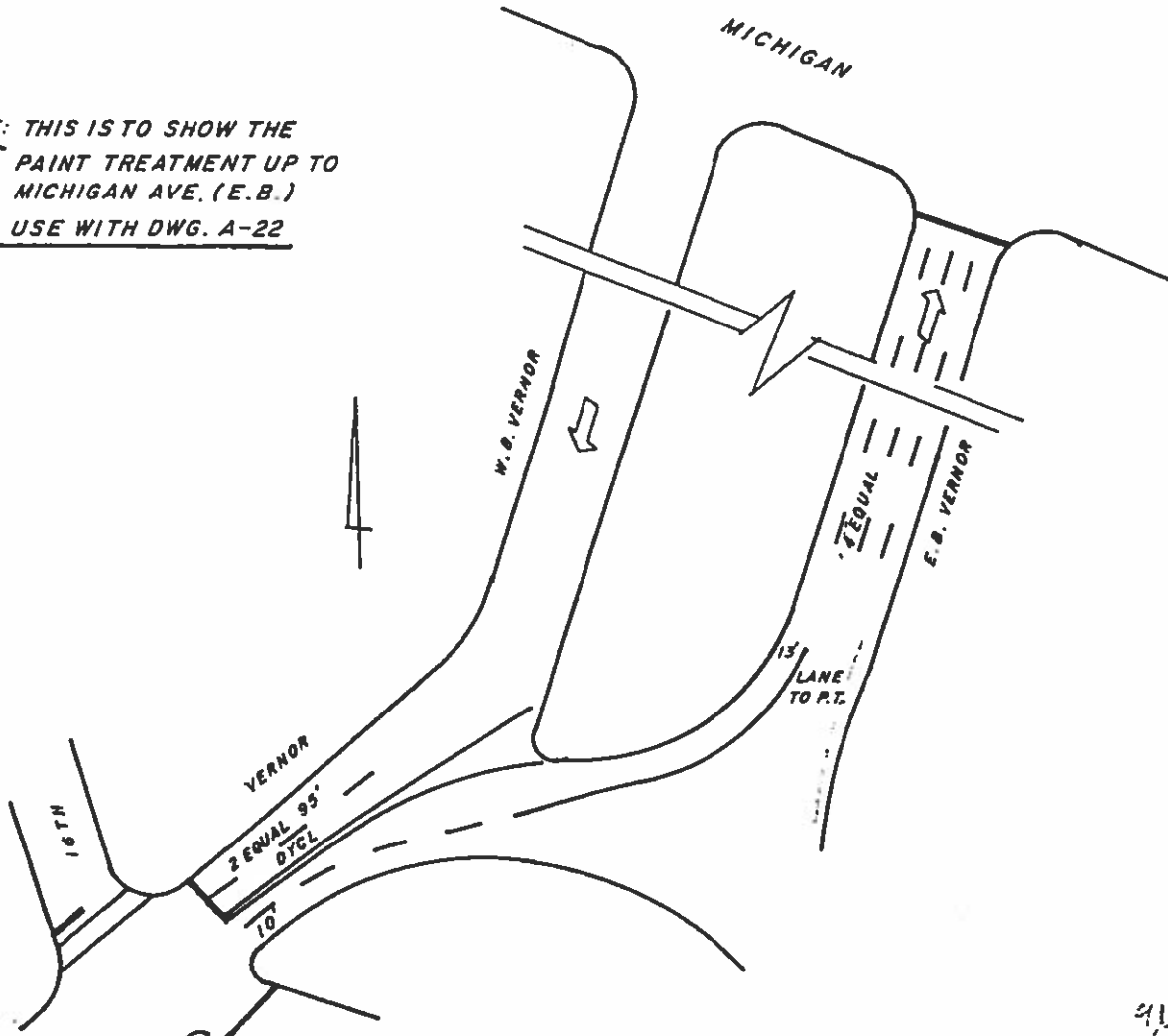
SCHEDULE OF ITEMS (continued)**PAGE 2 OF 2****LOCATION: W. VERNOR: 17TH TO MICHIGAN AVE.****LENGTH: 4140 FT WIDTH: 46 - 66 FT VARIES****WORK TYPE:** Cold Milling, HMA Resurfacing, Concrete Curb, Sidewalk, Driveway Approaches, Drainage Improvements and Misc Construction

Description of Work	Estimated Quantity	Item Unit
Pavt Repr, Rem, Modified	0	Syd
**Integral Curb and Sidewalk, 2 Feet, Modified	0	Ft
Sidewalk, Conc with Tree Roots, 4 inch, Modified	0	Sft
Sidewalk, Conc with Tree Roots, 6 inch, Modified	0	Sft
Detectable Warning Surface Tiles, Modified	100	Ft
Sidewalk Ramp, ADA, Modified	2,304	Sft
Sidewalk, Conc, 4 inch, Modified	1,908	Sft
**Sidewalk, Conc, 6 inch, Modified	0	Sft
Pavt Mrkg, Ovly Cold Plastic, 18 inch, Stop Bar	56	Ft
Pavt Mrkg, Ovly Cold Plastic, 6 inch, Crosswalk	252	Ft
Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk	0	Ft
Pavt Mrkg, Ovly Cold Plastic, Only	1	Ea
Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	0	Ea
Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	1	Ea
Pavt Mrkg, Sprayable Thermopl, 4 inch, White	640	Ft
Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow	1,120	Ft
Pavt Mrkg, Modified Urethane, 6 inch, Cross Hatching, Yellow	160	Ft
Pavt Mrkg, Modified Urethane, 6 inch, Cross Hatching, White	190	Ft
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	4	Ea
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	4	Ea
Traffic Regulator Control	0	LS
Lighted Arrow, Type C, Furn	2	Ea
Lighted Arrow, Type C, Oper	2	Ea
Minor Traf Devices	0	LS
Pavt Mrkg, Type NR, Paint, 4 inch, White, Temp	0	Ft
Pavt Mrkg, Type NR, Paint, 4 inch, Yellow, Temp	0	Ft
Plastic Drum, High Intensity, Furn	28	Ea
Plastic Drum, High Intensity, Oper	28	Ea
Sign, Type B, Temp, Prismatic, Furn	400	Sft
Sign, Type B, Temp, Prismatic, Oper	400	Sft
Hydroseeding, Modified	689	Syd
Topsoil Surface, Furn, LM, Modified	57	Cyd
Water, Shutoff, Adj, Modified	2	Unit
Recessing Pavement Markings, 6 inch	252	Ft
Pavt Mrkg, Sprayable Thermopl, 6 inch, Crosswalk	0	Ft
Pavt Mrkg, Sprayable Thermopl, 12 inch, Crosswalk	0	Ft
Pavt Mrkg, Sprayable Thermopl, 18 inch, Stop Bar	0	Ft
Pavt Mrkg, Sprayable Thermopl, 24 inch, Stop Bar	0	Ft
Pavt Mrkg, Sprayable Thermopl, 6 inch, White	0	Ft
Pavt Mrkg, Waterborne, Bike Sym and Arrow, White	0	Ea
Pavt Mrkg, Waterborne, Bike Sharrow Sym, White	0	Ea
Recessing Pavement Markings, 12 inch	0	Ft
Recessing Pavement Markings, 18 inch	56	Ft
Pavt Mrkg, Ovly Cold Plastic, Thru Arrow Sym	0	Ea

W. VERNOR

FROM	TO	LENGTH		SKETCH	WIDTH
		Actual	Charge CL LL		
18th	16th	900'	1,800'	<div style="border-bottom: 1px solid black; width: 100px; margin-bottom: 2px;"></div> <div style="border-bottom: 3px double black; width: 100px; margin-bottom: 2px;"></div> <div style="border-bottom: 1px solid black; width: 100px;"></div>	N 40' S
16th	14th - Michigan			See Dwg. A-22	40' Var.

NOTE: THIS IS TO SHOW THE
PAINT TREATMENT UP TO
MICHIGAN AVE. (E.B.)
USE WITH DWG. A-22



BRUNING 76677 FORM # 1260

SHT. 2 OF 2



CITY OF DETROIT
DEPARTMENT OF
TRANSPORTATION
Transportation Engineering

W. VERNOR

DRAWN ER
SCALE NONE
DATE 5/26/94

NO. CL-11

W. VERNOR

LIVERNOIS AVE.

TO

FISHER FWY SD.

TRAFFIC DATA:**PRESENT: 10,733****FUTURE: 11,806****COMMERCIAL: 3%****POSTED SPEED: 30 MPH**

TYPE OF PAVEMENT	ASPHALT OVER CONCRETE	
LENGTH		7,638 FEET
PAVEMENT WIDTH		46..60..50 FEET (VARIES)

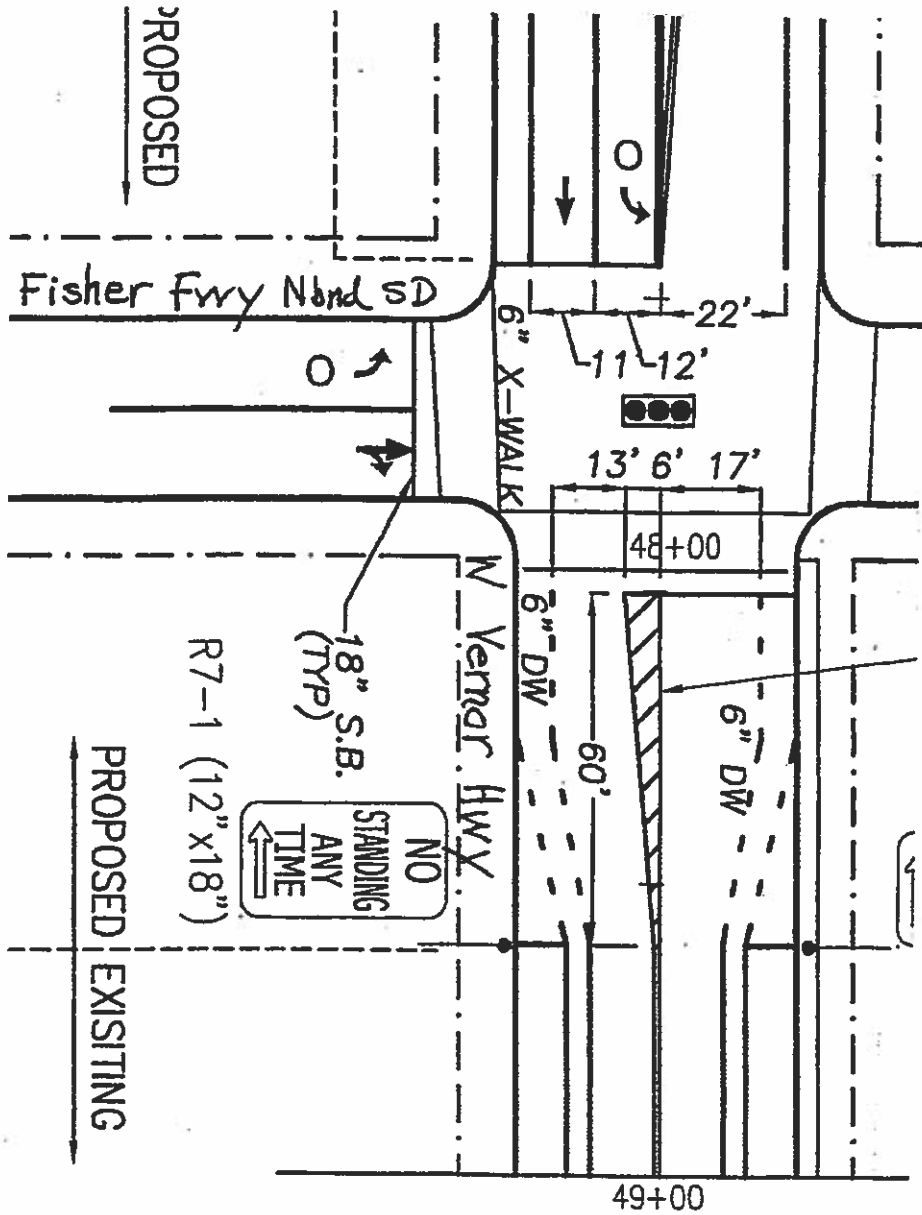
SCHEDULE OF ITEMS**PAGE 1 OF 2****LOCATION: W. VERNOR: LIVERNOIS TO FISHER FWY****LENGTH: 1154 FT WIDTH: 66 FT****WORK TYPE:** Cold Milling, HMA Resurfacing, Concrete Curb, Sidewalk, Driveway Approach, Drainage Improvements and Misc Construction

Description of Work	Estimated Quantity	Item Unit
Mobilization, Max.	0	LS
**Sidewalk, Rem	2,485	Syd
**Curb, Rem, Modified	2,841	Ft
**Integral Curb and Sidewalk, 2 Feet, Rem, Modified	52	Ft
Pavt, Rem	101	Syd
Excavation, Earth, Modified	20	Cyd
Granular Material, CI II	15	Cyd
Aggregate Base, 4 inch	29	Syd
Sewer Cleanout, Modified	450	Ft
Dr Structure Cover, Modified	43,862	Lb
Catch Basin A, Modified	1	Ea
Catch Basin BT, Modified	1	Ea
Dr Structure Cleaning, Modified	45	Ea
Dr Structure Cover, Adj, Case 1, Modified	166	Ea
Dr Structure Cover, Adj, Case 2, Modified	6	Ea
Reconstructing Dr Structure, Case 1, Modified	10	Ea
Reconstructing Dr Structure, Case 2, Modified	0	Ea
Pavt for Butt Joints, Rem	1,464	Syd
Hand Patching	5	Ton
HMA, 4E3	4,364	Ton
HMA, 5E3	3,273	Ton
Cold Milling HMA Surface, Modified	39,676	Syd
HMA Surface, Rem	1,942	Syd
Conditioning Existing Pavement, Modified	535	Ton
HMA Approach, Modified	374	Ton
HMA Shoulder, Modified	10	Ton
Pavt, Cleaning	0	LS
Conc Pavt , Misc, Nonreinf, 6 inch, Modified	0	Syd
Conc Pavt , Misc, Nonreinf, 8 inch, Modified	101	Syd
Pavt Repr, Nonreinf Conc, 10 inch, Modified	29	Syd
Cement	2	Ton
**Curb, Conc, Detail CD, Modified	2,841	Ft

** Estimated quantities for use at the discretion of the Engineer and subject to the Bureau Chief's or Head Engineer's approval during construction.

SCHEDULE OF ITEMS (continued)**PAGE 2 OF 2****LOCATION: W. VERNOR: LIVERNOIS TO FISHER FWY****LENGTH: 1154 FT WIDTH: 66 FT****WORK TYPE: Cold Milling, HMA Resurfacing, Concrete Curb, Sidewalk, Driveway Approaches, Drainage Improvements and Misc Construction**

Description of Work	Estimated Quantity	Item Unit
Pavt Repr, Rem, Modified	29	Syd
**Integral Curb and Sidewalk, 2 Feet, Modified	52	Ft
Sidewalk, Conc with Tree Roots, 4 inch, Modified	0	Sft
Sidewalk, Conc with Tree Roots, 6 inch, Modified	0	Sft
Detectable Warning Surface Tiles, Modified	315	Ft
Sidewalk Ramp, ADA, Modified	6,192	Sft
Sidewalk, Conc, 4 inch, Modified	16,174	Sft
**Sidewalk, Conc, 6 inch, Modified	0	Sft
Pavt Mrkg, Ovly Cold Plastic, 18 inch, Stop Bar	364	Ft
Pavt Mrkg, Ovly Cold Plastic, 6 inch, Crosswalk	2,388	Ft
Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk	150	Ft
Pavt Mrkg, Ovly Cold Plastic, Only	11	Ea
Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	3	Ea
Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	10	Ea
Pavt Mrkg, Sprayable Thermopl, 4 inch, White	7,467	Ft
Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow	12,477	Ft
Pavt Mrkg, Modified Urethane, 6 inch, Cross Hatching, Yellow	384	Ft
Pavt Mrkg, Modified Urethane, 6 inch, Cross Hatching, White	269	Ft
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	4	Ea
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	4	Ea
Traffic Regulator Control	0	LS
Lighted Arrow, Type C, Furn	2	Ea
Lighted Arrow, Type C, Oper	2	Ea
Minor Traf Devices	0	LS
Pavt Mrkg, Type NR, Paint, 4 inch, White, Temp	0	Ft
Pavt Mrkg, Type NR, Paint, 4 inch, Yellow, Temp	0	Ft
Plastic Drum, High Intensity, Furn	153	Ea
Plastic Drum, High Intensity, Oper	153	Ea
Sign, Type B, Temp, Prismatic, Furn	400	Sft
Sign, Type B, Temp, Prismatic, Oper	400	Sft
Hydroseeding, Modified	642	Syd
Topsoil Surface, Furn, LM, Modified	54	Cyd
Water, Shutoff, Adj, Modified	12	Unit
Recessing Pavement Markings, 6 inch	3,577	Ft
Pavt Mrkg, Sprayable Thermopl, 6 inch, Crosswalk	1,284	Ft
Pavt Mrkg, Sprayable Thermopl, 12 inch, Crosswalk	800	Ft
Pavt Mrkg, Sprayable Thermopl, 18 inch, Stop Bar	372	Ft
Pavt Mrkg, Sprayable Thermopl, 24 inch, Stop Bar	0	Ft
Pavt Mrkg, Sprayable Thermopl, 6 inch, White	9,281	Ft
Pavt Mrkg, Waterborne, Bike Sym and Arrow, White	39	Ea
Pavt Mrkg, Waterborne, Bike Sharrow Sym, White	3	Ea
Recessing Pavement Markings, 12 inch	950	Ft
Recessing Pavement Markings, 18 inch	736	Ft
Pavt Mrkg, Ovly Cold Plastic, Thru Arrow Sym	0	Ea



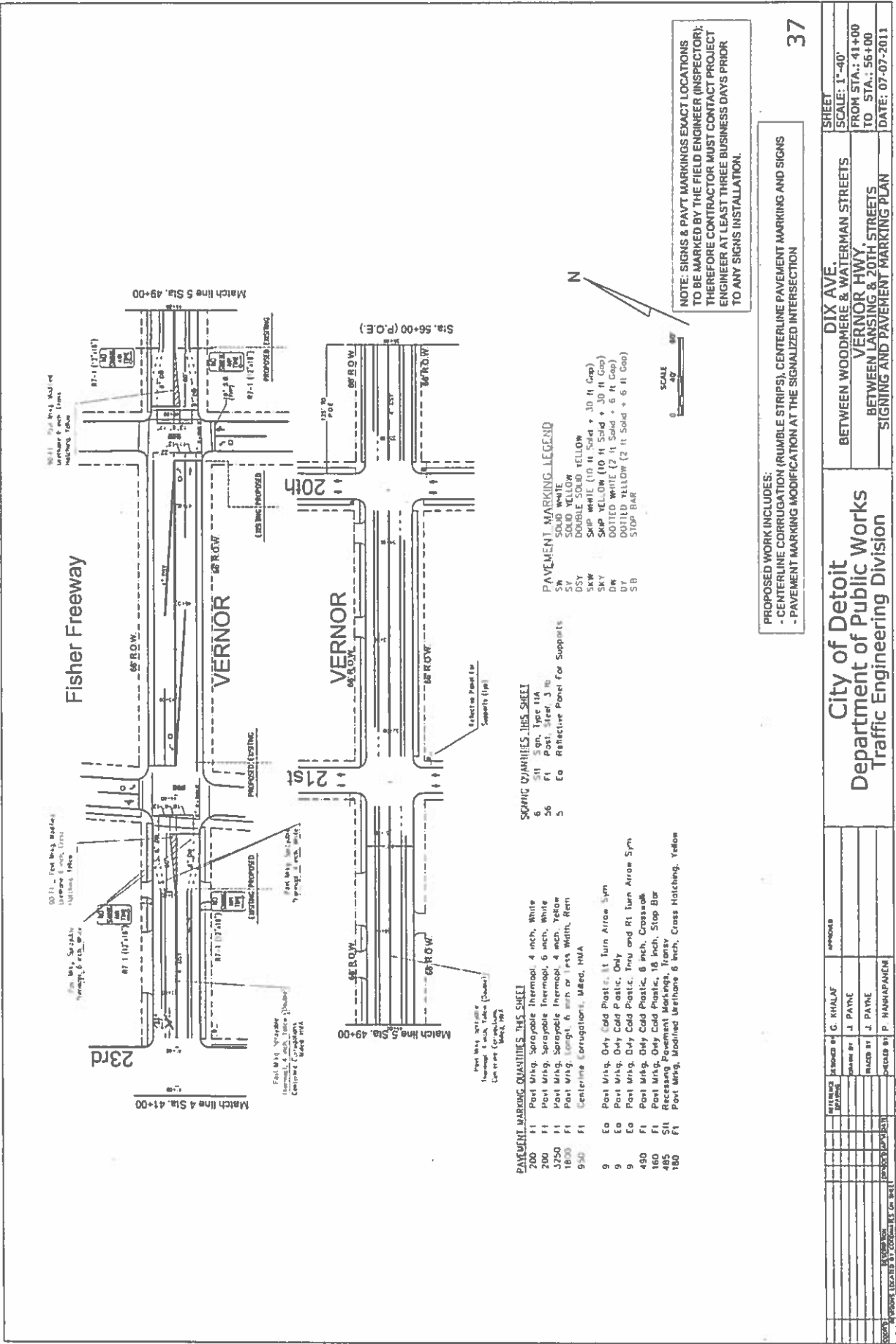
Match line 5 Sta. 49+00

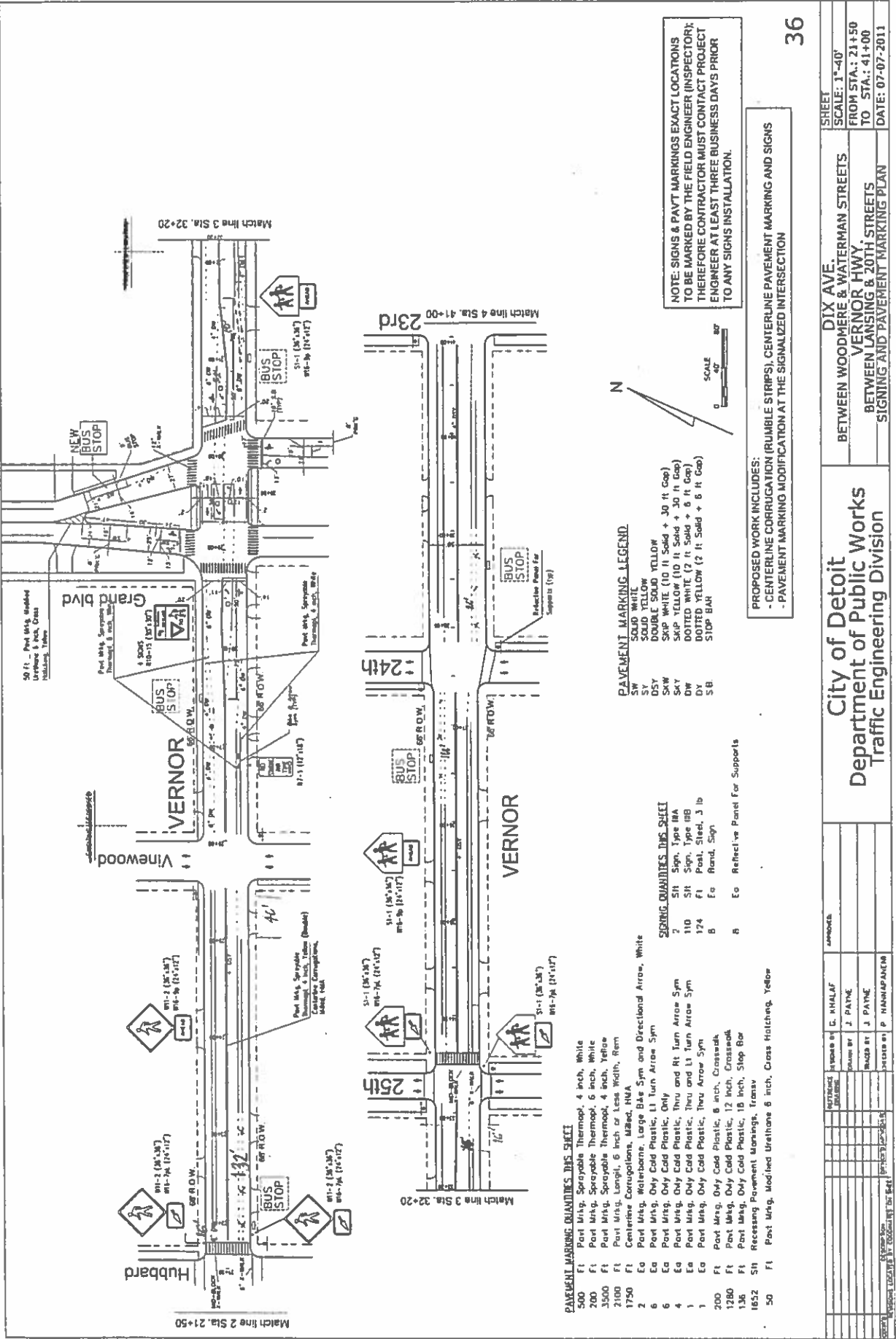
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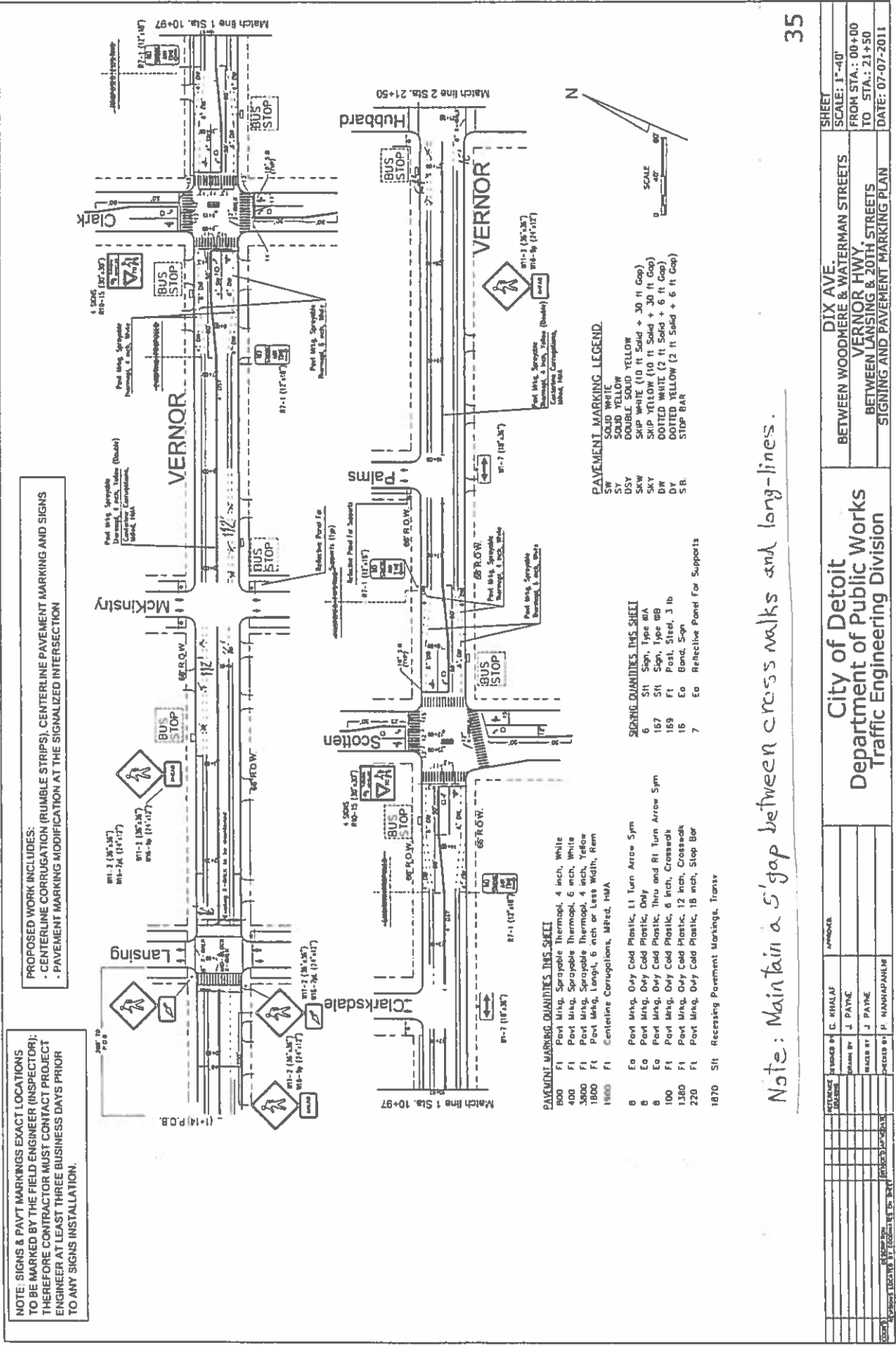
A-060

37

City of Detroit Traffic Engineering D. P. W.	Fisher Freeway Nbd SD @ W Vernor Hwy VERNOR HWY BETWEEN LANSING & 20TH STREETS SIGNING AND PAVEMENT MARKING PLAN	SHEET: CL-011-3 SCALE: 1"=40' FROM STA.: 41+00 TO STA.: 56+00 DATE: 07-07-2011
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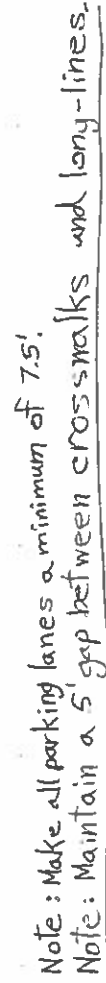


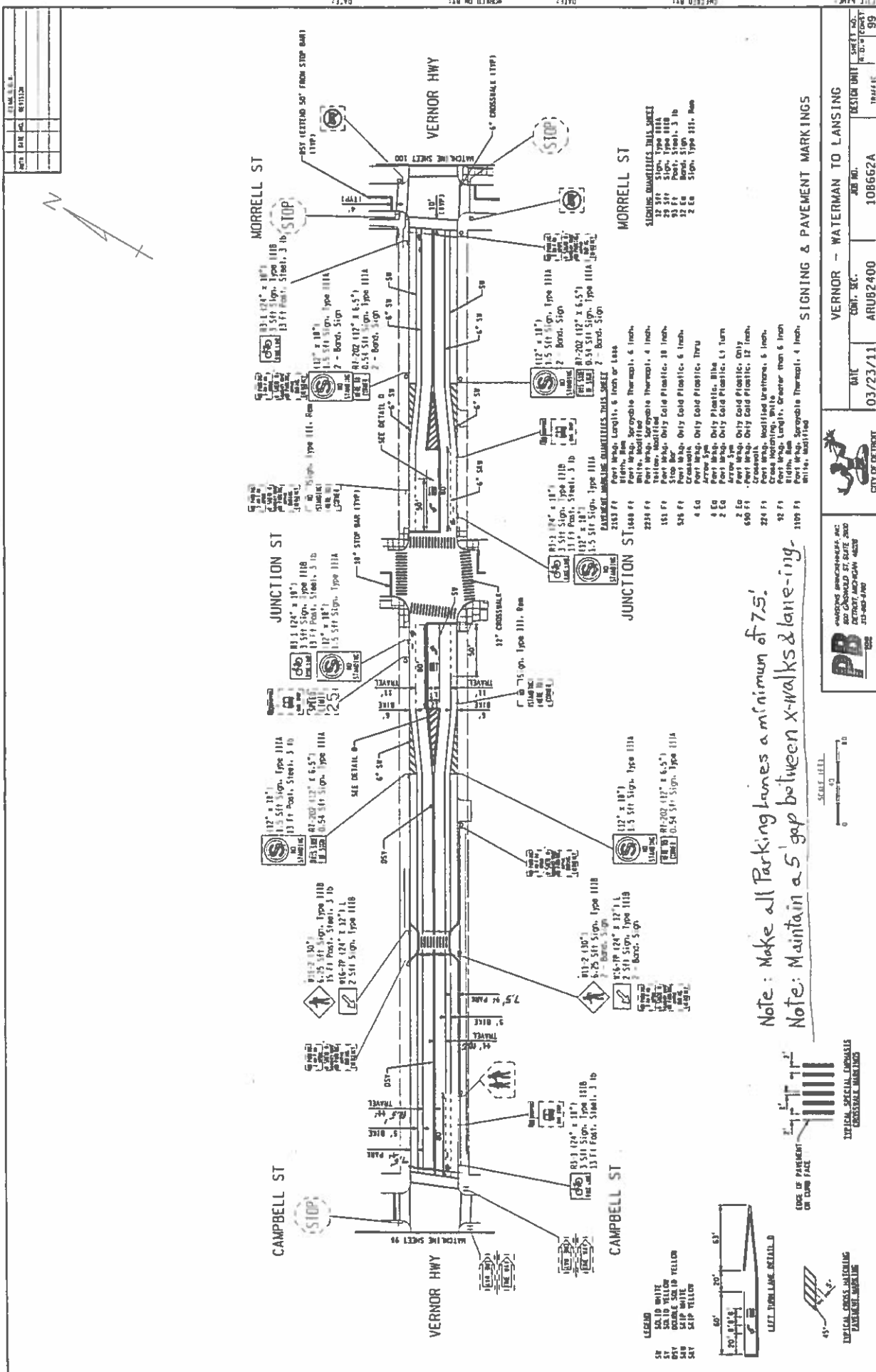
City of Detroit
Department of Public Works
Traffic Engineering Division

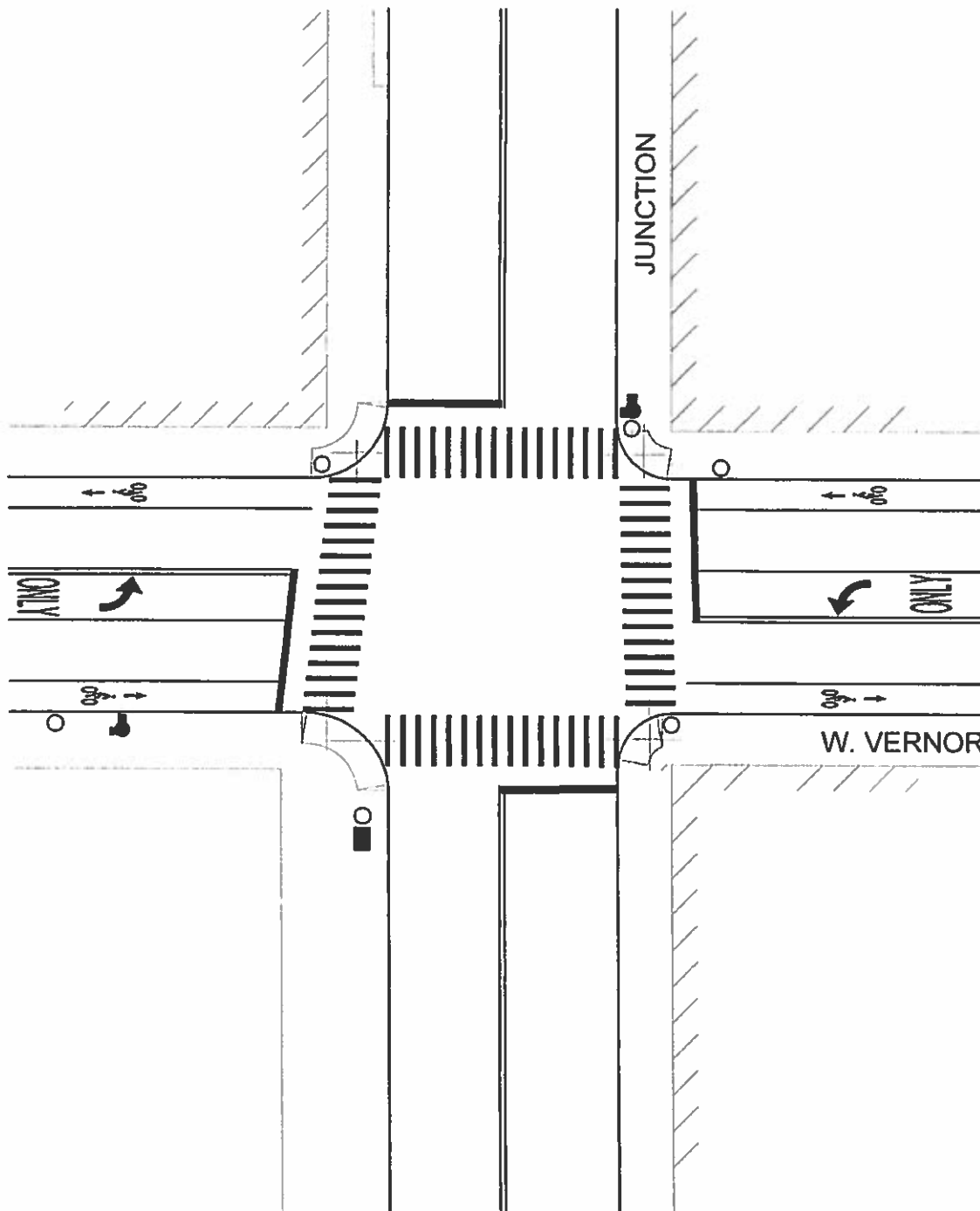
DIX AVE.
BETWEEN WOODWARD & WATERMAN STREETS
VERNOR HWY
BETWEEN LANSING & 20TH STREETS
SIGNING AND PAVEMENT MARKING PLAN

SHEET
SCALE: 1"=40'
FROM STA.: 00+00
TO STA.: 21+50
DATE: 07-07-2011

Note: Maintain a 5' gap between cross walks and long-lines.







REVISED: 6/3/2013 J.R.

CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 TRAFFIC ENGINEERING DIVISION

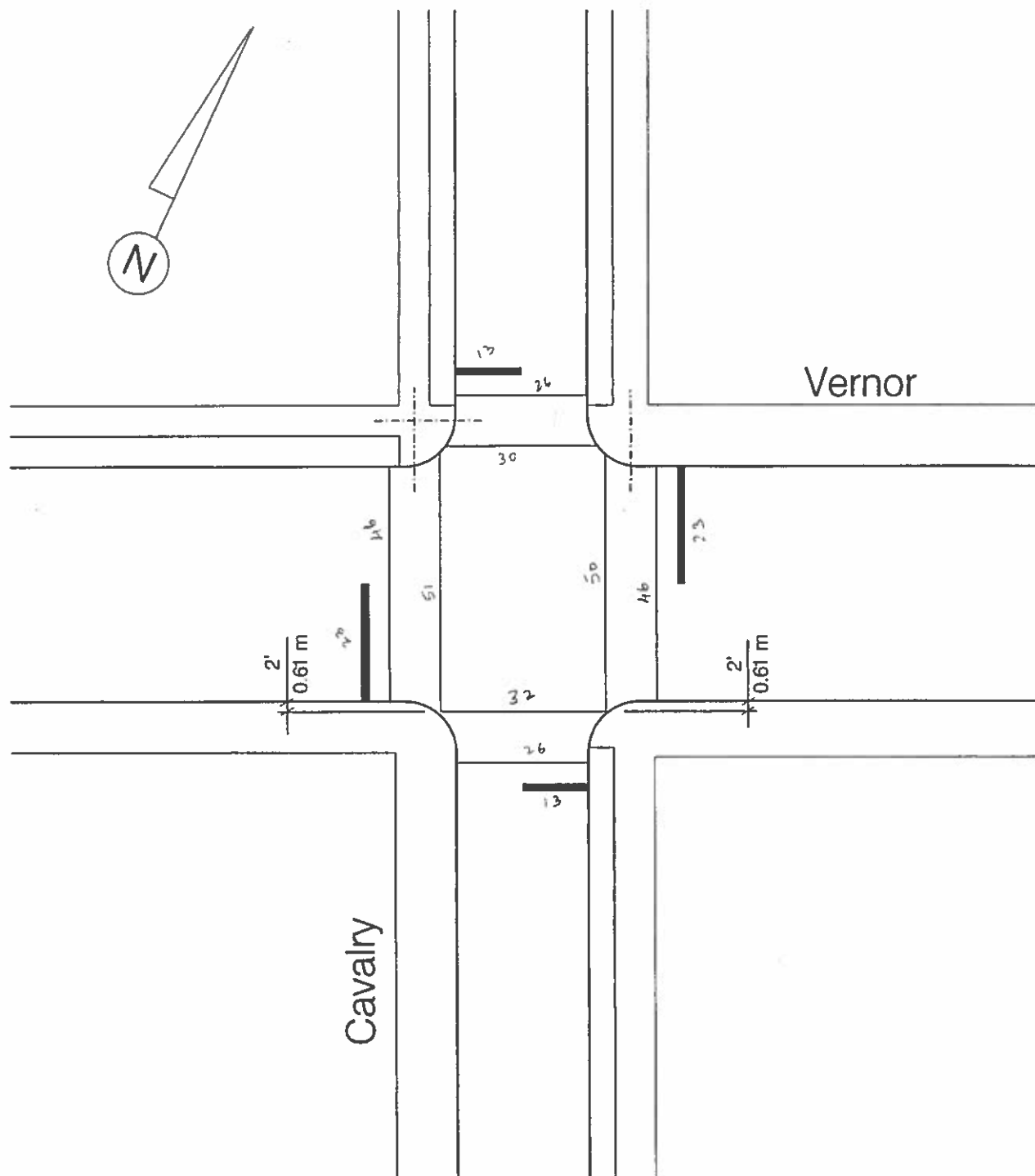
**JUNCTION
 VERNOR W.**

DRAWN : W.L. WILLIAMS
 SCALE : 1" = 30'
 DATE : 04 - 18 - 2013

NO. A-029

JS

formerly V-20a



City of Detroit
Department of
Public Works
Traffic Engineering Div.

Vernor-Cavalry

Drawn A I. B
Scale 1"=30' (1:400 m)
Date 2-26-2001

NO. A-101



W. VERNOR CENTRAL AVE. TO DIX ST.

TRAFFIC DATA:**PRESENT: 10,927****FUTURE: 12,020****COMMERCIAL: 3%****POSTED SPEED: 30 MPH**

TYPE OF PAVEMENT	ASPHALT OVER CONCRETE	
LENGTH		2,443 FEET
PAVEMENT WIDTH		46..32..40 FEET (VARIES)

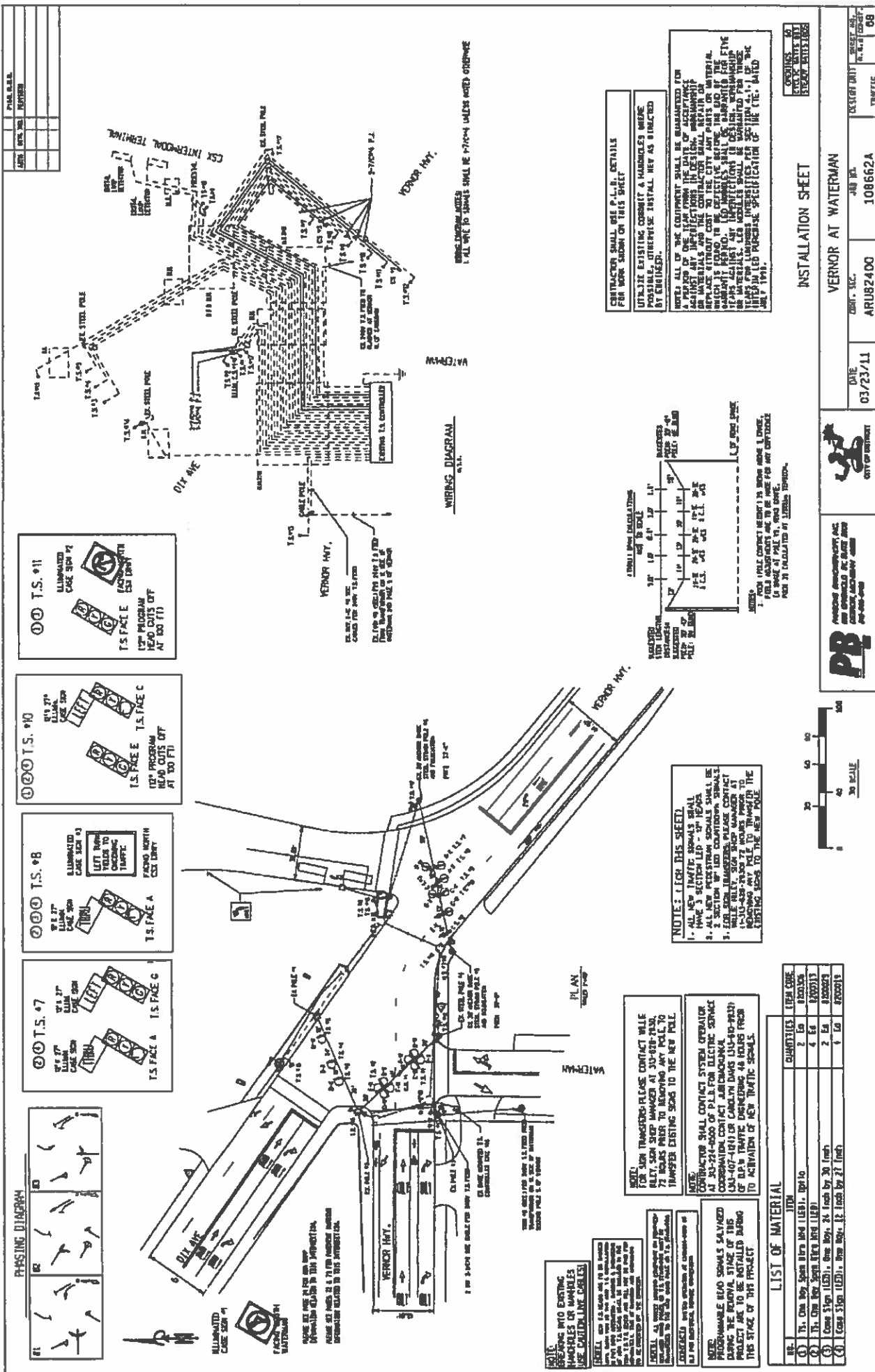
SCHEDULE OF ITEMS**PAGE 1 OF 2****LOCATION: W. VERNOR: CENTRAL TO DIX****LENGTH: 5,480 FT WIDTH : 46 - 40 FT VARIES****WORK TYPE: Cold Milling, HMA Resurfacing, Concrete Curb, Sidewalk, Driveway Approach, Drainage Improvements and Misc Construction**

Description of Work	Estimated Quantity	Item Unit
Mobilization, Max.	0	LS
**Sidewalk, Rem	0	Syd
**Curb, Rem, Modified	0	Ft
**Integral Curb and Sidewalk, 2 Feet, Rem, Modified	0	Ft
Pavt, Rem	0	Syd
Excavation, Earth, Modified	20	Cyd
Granular Material, CI II	15	Cyd
Aggregate Base, 4 inch	10	Syd
Sewer Cleanout, Modified	170	Ft
Dr Structure Cover, Modified	8,676	Lb
Catch Basin A, Modified	1	Ea
Catch Basin BT, Modified	1	Ea
Dr Structure Cleaning, Modified	17	Ea
Dr Structure Cover, Adj, Case 1, Modified	35	Ea
Dr Structure Cover, Adj, Case 2, Modified	0	Ea
Reconstructing Dr Structure, Case 1, Modified	1	Ea
Reconstructing Dr Structure, Case 2, Modified	0	Ea
Pavt for Butt Joints, Rem	425	Syd
Hand Patching	5	Ton
HMA, 4E3	1,358	Ton
HMA, 5E3	1,018	Ton
Cold Milling HMA Surface, Modified	12,342	Syd
HMA Surface, Rem	409	Syd
Conditioning Existing Pavement, Modified	166	Ton
HMA Approach, Modified	79	Ton
HMA Shoulder, Modified	0	Ton
Pavt, Cleaning	0	LS
Conc Pavt , Misc, Nonreinf, 6 inch, Modified	0	Syd
Conc Pavt , Misc, Nonreinf, 8 inch, Modified	0	Syd
Pavt Repr, Nonreinf Conc, 10 inch, Modified	10	Syd
Cement	2	Ton
**Curb, Conc, Detail CD, Modified	0	Ft




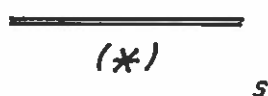

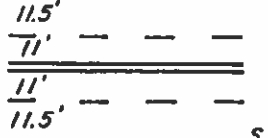








** Estimated quantities for use at the discretion of the Engineer and subject to the Bureau Chief's or Head Engineer's approval during construction.

SCHEDULE OF ITEMS (continued)**PAGE 2 OF 2****LOCATION: W. VERNOR: CENTRAL TO DIX****LENGTH: 5,480 FT WIDTH : 46 - 40 FT VARIES****WORK TYPE:** Cold Milling, HMA Resurfacing, Concrete Curb, Sidewalk, Driveway Approaches, Drainage Improvements and Misc Construction

Description of Work	Estimated Quantity	Item Unit
Pavt Repr, Rem, Modified	10	Syd
**Integral Curb and Sidewalk, 2 Feet, Modified	0	Ft
Sidewalk, Conc with Tree Roots, 4 inch, Modified	0	Sft
Sidewalk, Conc with Tree Roots, 6 inch, Modified	0	Sft
Detectable Warning Surface Tiles, Modified	0	Ft
Sidewalk Ramp, ADA, Modified	0	Sft
Sidewalk, Conc, 4 inch, Modified	0	Sft
**Sidewalk, Conc, 6 inch, Modified	0	Sft
Pavt Mrkg, Ovly Cold Plastic, 18 inch, Stop Bar	0	Ft
Pavt Mrkg, Ovly Cold Plastic, 6 inch, Crosswalk	0	Ft
Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk	0	Ft
Pavt Mrkg, Ovly Cold Plastic, Only	5	Ea
Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	0	Ea
Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	1	Ea
Pavt Mrkg, Sprayable Thermopl, 4 inch, White	3,866	Ft
Pavt Mrkg, Sprayable Thermopl, 4 inch, Yellow	3,830	Ft
Pavt Mrkg, Modified Urethane, 6 inch, Cross Hatching, Yellow	35	Ft
Pavt Mrkg, Modified Urethane, 6 inch, Cross Hatching, White	39	Ft
Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	4	Ea
Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	4	Ea
Traffic Regulator Control	0	LS
Lighted Arrow, Type C, Furn	2	Ea
Lighted Arrow, Type C, Oper	2	Ea
Minor Traf Devices	0	LS
Pavt Mrkg, Type NR, Paint, 4 inch, White, Temp	0	Ft
Pavt Mrkg, Type NR, Paint, 4 inch, Yellow, Temp	0	Ft
Plastic Drum, High Intensity, Furn	49	Ea
Plastic Drum, High Intensity, Oper	49	Ea
Sign, Type B, Temp, Prismatic, Furn	400	Sft
Sign, Type B, Temp, Prismatic, Oper	400	Sft
Hydroseeding, Modified	0	Syd
Topsoil Surface, Furn, LM, Modified	0	Cyd
Water, Shutoff, Adj, Modified	5	Unit
Recessing Pavement Markings, 6 inch	95	Ft
Pavt Mrkg, Sprayable Thermopl, 6 inch, Crosswalk	0	Ft
Pavt Mrkg, Sprayable Thermopl, 12 inch, Crosswalk	130	Ft
Pavt Mrkg, Sprayable Thermopl, 18 inch, Stop Bar	53	Ft
Pavt Mrkg, Sprayable Thermopl, 24 inch, Stop Bar	0	Ft
Pavt Mrkg, Sprayable Thermopl, 6 inch, White	4,202	Ft
Pavt Mrkg, Waterborne, Bike Sym and Arrow, White	14	Ea
Pavt Mrkg, Waterborne, Bike Sharrow Sym, White	3	Ea
Recessing Pavement Markings, 12 inch	130	Ft
Recessing Pavement Markings, 18 inch	53	Ft
Pavt Mrkg, Ovly Cold Plastic, Thru Arrow Sym	2	Ea



W. VERNOR

FROM	TO	LENGTH		SKETCH	WIDTH
		Actual	Charge CL LL		
West City Limits	100' W/O Dix-Waterman	7580'	15,160'		46'
					
					
100' W/O Dix-Waterman	120' E/O Dix-Waterman (See Dwg. A-1) *	220'	520' 150'		46'
					
120' E/O Dix-Waterman	Livernois	1600'	3200' 800'		46'
					
Livernois	24th	4695'	9390'		46'
					
24th	100' W/O Fisher W.S.D.	1955'	3910'		50'
					
100' W/O Fisher W.S.D.	100' E/O Fisher E.S.D.	600'		See Dwg. A-60	58' Var.
Fisher ESD	20th	600'		See Dwg. CL-11-3	
~20th					
100' E/O Fisher E.S.D.	18th	1255'	2510'		50'
					

← DISCONTINUED

SHT. 1 OF 2



CITY OF DETROIT
DEPARTMENT OF
TRANSPORTATION
Transportation Engineering

W. VERNOR

DRAWN ER
SCALE NONE
DATE 5/26/94

NO. CL-11

PW-6972

PROGRESS CLAUSE

PROGRESS CLAUSE: After receiving notice of award of contract, start work on the date designated as the starting date herein or the date agreed upon with the Engineer. In no case, shall any work be commenced prior to receipt of formal notice of award by the department.

The starting date for this project shall be as of the date of the Start Work notice issued after the contract has been approved and the entire project shall be completed **within 60 calendar days inclusive of any rain days** (except any landscaping maintenance guarantee work) from the starting date with all the HMA paving completed **within 45 calendar days** from start of the project. No HMA pavement work will be allowed between October 15, 2015 and April 15, 2016.

The low bidder(s) for the work covered by this proposal will be required to meet with department representatives to work out a detailed progress schedule. The schedule for this meeting will be set within one week after the low bidder is determined.

The named subcontractor(s) for Specialty and/or Designated Items (if such items are designated in the proposal) which materially affect the work schedule, shall also be present at the scheduled meeting and they will be required to sign the Progress Schedule to indicate their approval of the scheduled dates of work set forth in the Progress Schedule.

The City Engineering Division, Department of Public Works will arrange the time and place for the meeting.

The Progress Schedule shall include, as a minimum, the controlling work items for the completion of the project and the planned dates (or work day for a work day project) that these work items will be controlling operations. When specified in the bidding proposal, the date the project is to be opened to traffic as well as the final project completion date shall also be included in the project schedule.

If the Bidding Proposal specifies other controlling dates, these shall also be included in the Progress Schedule.

Failure on the part of the Contractor to carry out the provisions of the Progress Schedule, as established, may be considered sufficient cause to prevent bidding future projects until a satisfactory rate of progress is again established.

Liquidated damages will be applied based on Section 108 of the 2012 Michigan Department of Transportation Standard Specifications for Construction.

Contractor's attention is hereby called to see the Coordination Clause in the proposal.

**CITY OF DETROIT
SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC**

1 OF 5

DET: UP
JJR: BPC

Revised: 05-18-2012
Revised: 04-25-2011

GENERAL REQUIREMENTS

Traffic shall be maintained throughout the project in accordance with 2012 MDOT Standard Specifications for construction, including any supplemental specifications, and as herein specified. All traffic control devices shall conform to the 2011 Revised Edition of the Michigan Manual of Uniform Traffic Control Devices.

City of Detroit maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within or adjacent to the Construction Influence Area (CIA). The Maintenance Division of City of Detroit and or Contract Maintenance Agency will coordinate their operations with the Engineer to minimize the interference to the Contractor. No additional payment will be made to the Contractor for the joint use of the traffic control items.

MAINTENANCE OF TRAFFIC

- Walks, driveways, alleys and entrances to buildings shall not be blocked.
- The required number of lanes shall be maintained by plating of pavement.
- The paved surface shall be free of stored equipment, excavated material, etc. during specified hours.
- Protection and temporary crossings shall be provided for pedestrians at all crossings.
- Protection and temporary driveway access to residents and businesses shall be provided and maintained as directed by the Engineer.
- The Contractor shall notify local businesses a minimum of 48 hours prior to the implementation of any lane closures, weekend closures and major traffic shifts.
- The Contractor shall notify the Engineer, the state and the local police and fire department patrolling the area three (3) business days prior to making any lane closures or traffic switches.
- The Contractor must coordinate his operations with contractors performing work on other projects within or adjacent to the construction influence area.
- Steel plates, 3/4 inch thick, of sufficient size, shall be furnished and installed by the contractor to cover paving cuts and to provide crossings over trenches. No separate compensation will be made to furnish, install, maintain and remove these Steel Plates when no longer needed. It is the Contractor responsibility to pay for this item.
- Plates shall be bedded in Cold Patch so as to avoid rocking and the noise resulting there from, and shall be firmly anchored by spiking into the existing pavement.
- Approved HMA material, shall be used at the ends of the plates to eliminate bumps in traffic lanes. It is the Contractor's responsibility to pay for the approved HMA material.

2 OF 5

DET: MCS
JJR: BPC

Revised: 04-14-2010
Revised: 04-25-2011

- The spikes shall have a minimum length of 3 inches and shall be driven not closer than 12 inches from the edge of a trench up to 3 feet deep or 2 feet from the edge of a trench greater than 3 feet deep.
- For trenches wider than 4 feet, the Contractor shall submit a method of bridging to the Engineer for approval. All bridging shall be of a design that will satisfactorily carry HS-20 truck loading across the opening smoothly, safely, and without undue noise.

SIGNING AND TRAFFIC CONTROL

The Contractor shall furnish and install all signing necessary for the maintenance of traffic. Traffic control devices shall conform to the Michigan Manual of Uniform Traffic Control Devices, 2011 Edition, Part VI, Construction and Maintenance; the Michigan Department of Transportation Maintaining Traffic Safety Typical Standards: M0020a, M0040a, M0140a, M0240a, PMC22e, WZD-100-A and WZD-125-E; and/or the City of Detroit, Department of Public Works Standards on Maintenance and Utility Signing as applicable. The listed Traffic Typical Standards are most frequently used and it may be necessary to utilize other Traffic Typical as applicable.

Distances between sign locations will vary depending on the lengths of the City blocks in advance of the job site. Other traffic signing and barricading requirements for this project are contained in the proposal.

The Contractor may relocate signs and other portable barricades only after coordinating with representatives of the Traffic Engineering Division of the Department of Public Works.

The Contractor may purchase signs from the City of Detroit Sign Shop if desired or may obtain signs from other sources. If signs are requested from the City of Detroit, a letter of request must first be sent to the Operations Division of the City of Detroit.

CONSTRUCTION INFLUENCE AREA (CIA)

The CIA shall include the area within the right-of-way of the street or streets listed in the contract title and/or the cross streets within the limits of the construction staging.

The Contractor shall coordinate his operations with Contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).

3 OF 5

DET: MCS
JJR: BPC

Revised: 04-14-2010
Revised: 04-25-2011

TIME RESTRICTIONS

Maintaining traffic requirements and hourly restrictions are subject to change by the engineer.

No work shall be performed or lane closures allowed during the Memorial Day, July 4th, or Labor Day holiday periods, as defined by the Engineer. The contractor shall coordinate their work schedule around special events that take place in local communities in accordance with the Engineer. The contractor shall be responsible to contact the Engineer to acquire specific dates and locations for these events.

Other special events that may affect lane closures, as defined by the Engineer, are as follows:

- Downtown Hoe Down
- Freedom Festival
- Annual Detroit Electronic Music Festival
- Chrysler Jeep Detroit APBA Cup
- African World Festival
- Ford Detroit International Jazz Festival
- Ford Field Special Events and Home Games
- Comerica Park Special Events and Home Games
- JLA Special Events and Home Games
- Free Press Marathon

Work shall be suspended by the Engineer at any time traffic is being unduly hampered or delayed. In general, traffic is expected to be unduly hampered from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. weekdays. These hours may be adjusted by the Engineer.

TRUCK HAUL ROUTES

Truck haul routes selected by the Contractor must be submitted to the Detroit Department of Public Works for approval prior to the start of construction and are subject to regulations of the department.

BARRICADES

Plastic Drums, High Intensity, and Barricade, Type III, High Intensity, Double Sided, Lighted necessary for traffic control and public safety shall be furnished and erected by the Contractor.

4 OF 5

DET: MCS
JJR: BPC

Revised: 04-14-2010
Revised: 04-25-2011

WARNING LIGHTS

Battery operated warning flashers shall be used on all barricades in accordance with Michigan Department of Transportation Michigan Manual of Uniform Traffic Control Devices, 2011 Edition and any recent changes and to special provision regarding battery operated warning lights

STAGE CONSTRUCTION

The traffic control required by this Special Provision for work on various streets in the contract and adjacent roadways is based on the MMUTCD. At the discretion of the Engineer, the Contractor may be requested to conduct construction activities in certain segments of the project at such times that coordinates with adjacent property owner uses and activities. The Contractor shall submit for review and approval by the Engineer a sequence of operation/staging plans to complete the work by the specified completion date. The adjustments or changes in the staging of construction to accommodate property owners shall not be paid for separately and shall be included in the overall project cost.

- Traffic shall be maintained using attached traffic control typical.
- Pedestrians Traffic shall be maintained using Michigan Manual of Uniform Traffic Control Devices details shown in figures 6H-28 & 6H-29.

CLEANING ADJACENT STREETS AND SIDEWALKS

Dirt, mud, construction materials or other debris deposited on public sidewalks or streets as the result of spilling, tracking by the wheels of trucks or construction equipment or by other actions of the Contractor, his employees or subcontractors shall be immediately removed by the Contractor. Failure to do so is a violation of City Ordinances punishable by fines and/or imprisonment.

Failure to comply with all stipulations of the above traffic specifications will be cause for complete shutdown of the project.

In the event of an emergency, these restrictions are subject to change if traffic conditions indicate such a necessity. Traffic specifications are to be with the work crews at all times.

Temporary "No Parking" signs shall be placed in all parking areas when necessary to prohibit parking during construction activities. The "No Parking" signs shall be placed in all parking areas at least 24 hours and not more than 48 hours prior to construction activities.

5 OF 5

DET: MCS
JJR: BPC

Revised: 04-14-2010
Revised: 04-25-2011

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Maintaining Traffic will be measured and paid for at the contract unit price for the contract pay items.

Payment for providing and maintaining driveway access and pedestrians crossing, temporary No Parking Signs, ¾ inch steel plates, plates bedding, spikes will not be paid separately.

Payment for these items of work not paid for separately and/or other items are included in the total cost of the project.

Any equipment required for nighttime operations shall be included in the cost of the work items being placed.

Contract Item (Pay Item)	Pay Unit
Lighted Arrow, Type C, Furn	Each
Lighted Arrow, Type C, Oper.....	Each
Plastic Drum, High Intensity, Furn	Each
Plastic Drum, High Intensity, Oper.....	Each
Minor Traf Devices	Lump Sum
Sign Type B, Temp, Prismatic, Furn.....	Square Foot
Sign Type B, Temp, Prismatic, Oper	Square Foot
Traffic Regulator Control.....	Lump Sum

[View assistance for Search Results](#)

Search Results

Current Search Terms: fort* wayne* contracting*

Notice: This printed document represents only the first page of your SAM search results. More results may be available. To print your complete search results, you can download the PDF and print it.

No records found for current search.

Glossary

[Search Results](#)

Entity
Exclusion

[Search Filters](#)

By Record Status

By Functional Area - Entity Management

By Functional Area - Performance Information

SAM | System for Award Management 1.0

Note to all Users: This is a Federal Government computer system. Use of this system constitutes consent to monitoring at all times.

IBM v1.P.34.20150710-1415



PW-6972 CLEARANCES FORT WAYNE CONTRACTING

Income Tax

Manage Vendors
Manage vendors
Search vendors
Quick add vendor
Agency settings
Data Export
Training

profile
www.fortwaynecontracting.com

Jump to:
Accounts receivable
Business profile
Insurance
Insurance liabilities
Leave Feedback

not considered personal identifiable information and should be submitted on the form and submitted here
Vendor certified they possess this qualification

ITC Certifications

Income Tax Clearance

Clearance Form Agency document for this certification: [TaxClearanceRequest2014_editable.pdf](#)
Document uploaded by vendor: Income Tax Clearance.pdf View Download

Expiration Date and Comments

This section is to be filled out by the City of Detroit
If you are the responsible party, you must upload the document by the expiration date.
Expiration date: Apr 22 2016 ID

Comments

Business profile Insurance Insurance liabilities

Services, Heavy (incl.)

11:11 PM 4/22/2015

Expires 4/22/16

Accounts Receivable

Manage Vendors
Manage vendors
Search vendors
Quick add vendor
Agency settings
Data Export
Training

profile
www.fortwaynecontracting.com

Jump to:
Accounts receivable
Business profile
Insurance
Insurance liabilities
Leave Feedback

If your business does not already have an approved Accounts Receivable clearance, please upload your completed request for clearance form here. The City will complete its clearance process and approve/deny the clearance within the BidSync system.

NOTE: Do not submit any personal identifiable information, including social security numbers, through the BidSync system. If this type of information is required for your clearance request, please send it via secure email to RevenueCollections@DetroitMi.gov. EDCs are not considered personal identifiable information and should be submitted on the form and submitted here.

Vendor certified they possess this qualification

ARC Certifications

Accounts Receivable Clearance

Clearance Form Agency document for this certification: [Property Tax Clearance - Accounts Receivable Business Application.pdf](#)
Document uploaded by vendor: Accounts Receivable Clearance Application-C8-C6-15.pdf View Download

Expiration Date and Comments

This section will be filled out by the City of Detroit
If you are the responsible party, you must upload the document by the expiration date.
Expiration date: Jan 15 2016 ID

Comments

Business profile Insurance Insurance liabilities

Services, Heavy (incl.)

11:11 PM 4/22/2015

Expires 1/15/16

Inc Tax

Vendor Clearance

Supplier Name

ALJAX PAVING INDUSTRIES INC

Supplier Number

20483

Tax Registration

381383205

Income Tax Clearance

Clearance Status

Approved

Approval / Denial Date

19-MAR-2015

Clearance Expiration Date

19-MAR-2016

Date

Exit

Clear

CITY OF DETROIT

ACCOUNTS RECEIVABLE CLEARANCE APPLICATION
 2 WOODWARD AVENUE, SUITE 105, COLEMAN A YOUNG MUNICIPAL CENTER
 REVENUE COLLECTIONS UNIT (313) 224-4087 / FAX: 224-4238 / RevenueCollections@DetroitMi.gov

SECTION A: BUSINESS LICENSE BUDGET CITY COUNCIL DDOT DPW FINANCE FIRE HEALTH
 HUMAN RIGHTS LAW MAYOR OMBUDSMAN PLANNING & DEVELOPMENT POLICE PURCHASING
 RECREATION WATER & SEWAGE OTHER City Engineering, Dept. of Public Works Bids/Contracts
 ADDRESS OF DEPARTMENT 2 Woodward Ave., 642 CAYMC, Detroit, MI 48226
 DATE SENT June 29, 2015 CONTACT PERSON Annette Smith
 PHONE NUMBER (313) 224-2389 FAX NUMBER (313) 224-4238 EMAIL smitha@detroitmi.gov
 CONTRACT AMOUNT \$

SECTION B: CORPORATION LICENSE TYPE
 CORPORATION NAME Ajax Paving Industries, Inc.
 ADDRESS 830 Kirts Blvd., Suite 100 CITY/STATE/ZIP Troy, MI 48064 OWN ☒ LEASE
 CITY PERSONAL PROPERTY NUMBER None FID / EIN NUMBER
 OTHER CITY-OWNED PROPERTY PARCELS
 CONTACT PERSON Gayle Jeffrey PHONE NUMBER (248) 244-3339 EMAIL ADDRESS gjeffrey@ajaxpaving.com

SECTION C: PARTNERSHIP LICENSE TYPE
 BUSINESS NAME
 BUSINESS ADDRESS CITY/STATE/ZIP OWN LEASE
 CITY PERSONAL PROPERTY NUMBER FID / EIN NUMBER
 A. PARTNER'S NAME PHONE NUMBER
 HOME ADDRESS CITY/STATE/ZIP OWN LEASE
 DRIVER'S LICENSE # OTHER CITY-OWNED PROPERTY PARCELS
 B. PARTNER'S NAME PHONE NUMBER
 HOME ADDRESS CITY/STATE/ZIP OWN LEASE
 DRIVER'S LICENSE # OTHER CITY-OWNED PROPERTY PARCELS
 CONTACT PERSON PHONE NUMBER EMAIL ADDRESS

SECTION D: SOLE PROPRIETORSHIP LICENSE TYPE
 BUSINESS NAME
 BUSINESS ADDRESS CITY/STATE/ZIP OWN LEASE
 CITY PERSONAL PROPERTY NUMBER FID / EIN NUMBER
 OWNER'S NAME DRIVER'S LICENSE # PHONE NUMBER
 HOME ADDRESS CITY/STATE/ZIP OWN LEASE
 OTHER CITY-OWNED PROPERTY PARCELS
 EMAIL ADDRESS

SECTION E: PERSONAL SERVICES
 NAME ADDRESS OWN LEASE
 CITY/STATE/ZIP
 PHONE NUMBER DRIVER LICENSE #
 OTHER PROPERTY ADDRESSES OWNED IN WITHIN DETROIT
 SOCIAL SECURITY NUMBER EMAIL ADDRESS

FOR TREASURY COLLECTION USE ONLY

APPROVED DENIED DENIED WITH ATTACHMENTS
 DATE JUL 09 2015 CLEARANCE VALID UNTIL JAN 15 2016

COVENANT OF EQUAL OPPORTUNITY**(Application for Clearance – Terms Enforced After Contract is Awarded)**

I, being a duly authorized representative of **Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc.**, a joint venture, (hereinafter "Contractor"), am hereby authorized to enter into a Covenant of Equal Opportunity, (hereinafter "Covenant") with the City of Detroit, (hereinafter "City"); obligating the Contractor and all sub-contractors, not to discriminate against any employee or applicant for employment, training, education, or apprenticeship connected directly or indirectly with the performance of the contract, with respect to his/her hire, promotion, job assignment, tenure, terms, conditions or privileges of employment because of race, color, religious beliefs, public benefit status, national origin, age, marital status, disability, sex, sexual orientation, or gender identity or expression; except as otherwise exempted under City Code, Ordinance No. 27-2-12.

Contractor will ensure that the City of Detroit Human Rights Department shall receive notification of all potential sub-contractors and a copy of their Covenant prior to the commencement of work on any City of Detroit contract. Contractor further agrees that the City of Detroit reserves the right to require additional information prior to, during and at any time after the Covenant is fully executed.

Furthermore, Contractor agrees that this Covenant is valid for the life of the contract and/or for a specified period of time as indicated below and that a breach of this Covenant shall be deemed a material breach of contract and be subject to damages pursuant to City Code, Ordinance No. 27-3-2, Section (e).

RFQ / PO No. (If applicable)

PW-6972

Duration of Covenant:

Date on Start Work Notice

to

December 31, 2017

Printed Name of Contractor Organization:
(Type or Print Legibly)

Fort Wayne Contracting, Inc./Ajax Paving Industries, Inc., a joint venture

Contractor Address:

320 E. Seven Mile Rd., Detroit, MI 48203

(Address to include City, State, Zip)

Contractor Phone/F-mail:

313-368-3400

(Phone)

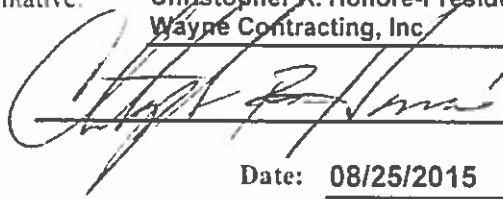
patty@fortwaynecontracting.com

(E-mail)

Printed Name & Title of Authorized Representative:

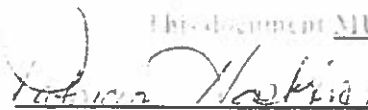
Christopher R. Honore-President of Fort Wayne Contracting, Inc.

Signature of Authorized Representative:



Date: 08/25/2015

Signature of Notary:

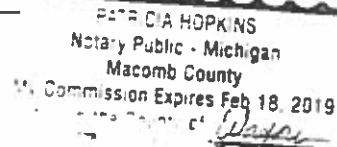


Printed Name of Seal of Notary:

Patricia Hopkins

My Commission Expires:

02/18/2019



FOR CONTRACTING DEPARTMENT USE ONLY:

Date Rec'd: 9/28/15

Received By: Adrienne D. Smith

Title: Adrian Cost III

By Fax (COPY) of the notarized Covenant and Award Letter to the Human Rights Department 313-224-3434



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

8/31/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Guy Hurley, LLC 1080 Kirts Blvd., Suite 500 Troy MI 48084 INSURED Fort Wayne Contracting, Inc. 300 E. Seven Mile Road Detroit MI 48203	CONTACT NAME: Mary Ellen Krakauer PHONE (A/C, No. Ext.): (248) 519-1430 FAX (A/C, No.): (248) 519-1401 E-MAIL ADDRESS: mkrakauer@ghbh.com INSURER(S) AFFORDING COVERAGE <table style="width: 100%;"> <tr> <td style="width: 70%;">INSURER A: Amerisure Mutual Ins. Co. AX</td> <td style="width: 30%;">NAIC # 23396</td> </tr> <tr><td>INSURER B:</td><td></td></tr> <tr><td>INSURER C:</td><td></td></tr> <tr><td>INSURER D:</td><td></td></tr> <tr><td>INSURER E:</td><td></td></tr> <tr><td>INSURER F:</td><td></td></tr> </table>	INSURER A: Amerisure Mutual Ins. Co. AX	NAIC # 23396	INSURER B:		INSURER C:		INSURER D:		INSURER E:		INSURER F:	
INSURER A: Amerisure Mutual Ins. Co. AX	NAIC # 23396												
INSURER B:													
INSURER C:													
INSURER D:													
INSURER E:													
INSURER F:													

COVERAGES**CERTIFICATE NUMBER:** 15-16 GL Master**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY	X	2062046	5/28/2015	5/28/2016	EACH OCCURRENCE \$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000
	<input checked="" type="checkbox"/> Contractual Liability					MED EXP (Any one person) \$ 5,000
	<input checked="" type="checkbox"/> XCU Coverage Included					PERSONAL & ADV INJURY \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER					GENERAL AGGREGATE \$ 2,000,000
						PRODUCTS - COMP/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY		2062047	5/28/2015	5/28/2016	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO					BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident) \$
						PIP-Basic \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR		2062048	5/28/2015	5/28/2016	EACH OCCURRENCE \$ 4,000,000
	<input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE					AGGREGATE \$ 4,000,000
	<input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$					\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	Y/N <input type="checkbox"/> N/A	WC2087627	5/28/2015	5/28/2016	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)					E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
						E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 Project: FW6972:HMA. Resurfacing & Misc. Construction at various locations citywide. City of Detroit is Additional Insured for General Liability when required by written contract. 30 Day Notice of Cancellation (Except Non-Payment of Premium) applies in favor of the City of Detroit for General Liability when required by written contract.

CERTIFICATE HOLDER**CANCELLATION**

City of Detroit Finance Department, Accounts Payable 1006 Coleman A. Young Municipal Center Detroit, MI 48226	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Paul Hurley/WEAL <i>Paul M. Hurley</i>
---	--

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ACORD 25 (2014/01)

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INS025 (2014/01)



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/17/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Guy Hurley, LLC 1080 Kirts Blvd., Suite 500 Troy MI 48084	CONTACT NAME: Donna Griffiths PHONE (A/C No. Ext.): (248) 519-1439 FAX (A/C No.): (248) 519-1401 E-MAIL ADDRESS: dgriffiths@ghbh.com														
INSURED Ajax Paving Industries, Inc. 830 Kirts Blvd., Suite 100 Troy MI 48084	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">INSURER(S) AFFORDING COVERAGE</th> <th style="text-align: left;">NAIC #</th> </tr> <tr> <td>INSURER A Travelers Indemnity Co. A+XV</td> <td>25658</td> </tr> <tr> <td>INSURER B Houston Casualty Co. A+XIV</td> <td>42374</td> </tr> <tr> <td>INSURER C ACIG Insurance Company AVIII</td> <td>19984</td> </tr> <tr> <td>INSURER D Travelers Prop Cas Co. A+XV</td> <td>25674</td> </tr> <tr> <td>INSURER E:</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A Travelers Indemnity Co. A+XV	25658	INSURER B Houston Casualty Co. A+XIV	42374	INSURER C ACIG Insurance Company AVIII	19984	INSURER D Travelers Prop Cas Co. A+XV	25674	INSURER E:		INSURER F:	
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INSURER E:															
INSURER F:															

COVERAGES **CERTIFICATE NUMBER:** 15-16 Master **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY	X	VTC2KC08A097329	6/1/2015	6/1/2016	EACH OCCURRENCE \$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000
	<input checked="" type="checkbox"/> XCU Coverage Included					MED EXP (Any one person) \$ 5,000
	<input checked="" type="checkbox"/> Contractual Liability					PERSONAL & ADV INJURY \$ 1,000,000
	GENL AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:					GENERAL AGGREGATE \$ 2,000,000
						PRODUCTS - COMP/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY		CAF8A097330	6/1/2015	6/1/2016	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO					BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS				BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS	<input type="checkbox"/> NON-OWNED AUTOS				PROPERTY DAMAGE (Per accident) \$
						PIP-Basic \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB	<input checked="" type="checkbox"/> OCCUR	H15XC5013203	6/1/2015	6/1/2016	EACH OCCURRENCE \$ 5,000,000
	<input type="checkbox"/> EXCESS LIAB	<input type="checkbox"/> CLAIMS-MADE				AGGREGATE \$ 5,000,000
	<input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$					
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	Y/N N N/A	WCA000004715	6/1/2015	6/1/2016	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)					E L EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E L DISEASE - EA EMPLOYEE \$ 1,000,000
						E L DISEASE - POLICY LIMIT \$ 1,000,000
D	Inland Marine		QT6308A099243	6/1/2015	6/1/2016	Leased/Rented Equip \$550,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 Project: PW6972: HMA. Resurfacing & Misc. Construction at various locations citywide. The City of Detroit is an Additional Insured for General Liability when required by written contract. 30 Day Notice of Cancellation (Except Non-Payment of Premium) applies in favor of the City of Detroit for General Liability when required by written contract.

CERTIFICATE HOLDER
CANCELLATION

City of Detroit
 Finance Department, Accounts Payable
 1006 Coleman A. Young
 Municipal Center
 Detroit, MI 48226

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Robert Heuer/WEAL

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ACORD 25 (2014/01)

INS025 (01/14/11)

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This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

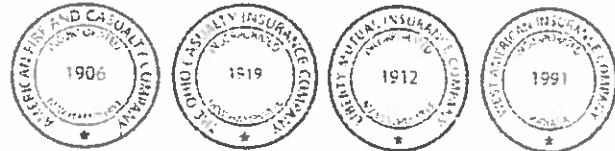
Certificate No. 6950014

American Fire and Casualty Company
The Ohio Casualty Insurance CompanyLiberty Mutual Insurance Company
West American Insurance Company**POWER OF ATTORNEY**

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint Anne Barick; Holly Nichols; Michael D. Lechner; Michelle Buechel; Paul M. Hurley; Richard S. McGregor; Robert D. Heuer; T. R. Guy

all of the city of Troy, state of MI each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 15th day of April, 2015.



American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 15th day of April, 2015, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires March 28, 2017
Member Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS - Sect on 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts - SECTION 5 Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this _____ day of _____, 2015.



By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.


To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

**Prevailing Wage and Fringe Benefit Rates Required
for City Projects Ordinance
Contractor Certification**

By signature in the space provided below, the Contractor acknowledges receipt of a copy of Ordinance No. 01-04, which is entitled Prevailing Wage and Fringe Benefit Rates Required for City Project and codified at Sections 18-5-60 through 18-5-69 of the 1984 Detroit City Code ("Ordinance"), a copy of which is attached to and made a part of this contract and affirms that it will comply with this Ordinance in all respects.

The Contractor affirms that prevailing wages, as established from time to time by the State of Michigan, shall be paid by the Contractor and all subcontractors under the terms of the Contract and for the duration of the Contract.

Company Name: Fort Wayne Contracting, Inc.

Authorized Signature:  Date: 07/27/2015

Print Name: Christopher R. Honore


Title: President

**Prevailing Wage and Fringe Benefit Rates Required
for City Projects Ordinance
Contractor Certification**

By signature in the space provided below, the Contractor acknowledges receipt of a copy of Ordinance No. 01-04, which is entitled Prevailing Wage and Fringe Benefit Rates Required for City Project and codified at Sections 18-5-60 through 18-5-69 of the 1984 Detroit City Code ("Ordinance"), a copy of which is attached to and made a part of this contract and affirms that it will comply with this Ordinance in all respects.

The Contractor affirms that prevailing wages, as established from time to time by the State of Michigan, shall be paid by the Contractor and all subcontractors under the terms of the Contract and for the duration of the Contract.

Company Name: Ajax Paying Industries, Inc.

Authorized Signature:  Date: 07/27/15

Print Name: Brandon G. King

Title: Estimating Manager

CITY OF DETROIT
SLAVERY ERA RECORDS AND INSURANCE DISCLOSURE AFFIDAVIT

1. Name of Contractor: Fort Wayne Contracting, Inc.

2. Address of Contractor: 320 E. Seven Mile Rd.

Detroit, MI 48203

3. Name of Predecessor Entities (if any): N/A

4. Prior Affidavit Submission? No X Yes, on: 04/09/2015
 (Date of prior submission)

5. Contractor was established in (year) and did not exist during the slavery era in the United States, is not a successor in interest to any entity that existed during such time, and therefore has no relevant records to search, or any pertinent information to disclose.

 Contractor has searched their records and those of any predecessor entity, and has found no records that they or any predecessor(s) made any investments in, or derived profits from the slave industry or from slave holder insurance policies.

Contractor has found records that they or their predecessor(s) made investments in, or derived profits from, the slave industry or slave holder insurance policies. The nature of the investment, profits, or insurance policies, including the names of any slaves or slave holders, is disclosed in the attached document(s).

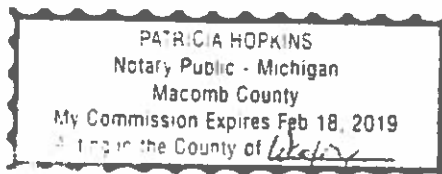
6. I declare that the representations made in this Affidavit are accurate to the best of my knowledge and are based upon a diligent search of records in the Contractor's possession or knowledge. All documentation attached to this Affidavit reflects full disclosure of all records that are required to be disclosed to the City of Detroit. I also acknowledge that any failure to conduct a diligent search, or to make a full and complete disclosure, shall render this contract voidable by the City of Detroit.

Christopher R. Honoré (Printed Name) President (Title)

[Signature] (Signature) July 14, 2015 (Date)

Subscribed and sworn to before me
 this 14th day of July, 2015

[Signature]
 Notary Public, Macomb County, Michigan
 My Commission Expires: 02/18/2019



CITY OF DETROIT
SLAVERY ERA RECORDS AND INSURANCE DISCLOSURE AFFIDAVIT

1. Name of Contractor: Ajax Paving Industries, Inc.

2. Address of Contractor: 830 Kirts Blvd., Ste. 100

Troy, MI 48007

3. Name of Predecessor Entities (if any): N/A

4. Prior Affidavit Submission? No X Yes, on: 04/09/2015
 (Date of prior submission)

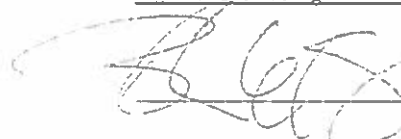
5. X Contractor was established in 1951 (year) and did not exist during the slavery era in the United States, is not a successor in interest to any entity that existed during such time, and therefore has no relevant records to search, or any pertinent information to disclose.

Contractor has searched their records and those of any predecessor entity, and has found no records that they or any predecessor(s) made any investments in, or derived profits from the slave industry or from slave holder insurance policies.

 Contractor has found records that they or their predecessor(s) made investments in, or derived profits from, the slave industry or slave holder insurance policies. The nature of the investment, profits, or insurance policies, including the names of any slaves or slave holders, is disclosed in the attached document(s).

6. I declare that the representations made in this Affidavit are accurate to the best of my knowledge and are based upon a diligent search of records in the Contractor's possession or knowledge, all documentation attached to this Affidavit reflects full disclosure of all records that are required to be disclosed to the City of Detroit. I also acknowledge that any failure to conduct a diligent search, or to make a full and complete disclosure, shall render this contract voidable by the City of Detroit.

Brandon G. King (Printed Name) Estimating Manager (Title)

 (Signature) July 14, 2015 (Date)

Subscribed and sworn to before me
 this 14th day of July, 2015

Notary Public, County, Michigan
 My Commission Expires

JENEFER LYN BASHAWATY
 NOTARY PUBLIC, STATE OF MI
 COUNTY OF LAPEER
 MY COMMISSION EXPIRES Nov 4, 2020
 ACTING IN COUNTY OF

FOR EMPLOYMENT

We consider applications for all positions without regard to race, color, religion, creed, sex, national origin, disability, sexual orientation, citizenship status or any other legally protected status.

Date of Application _____

Position Applied For _____

How Did You Learn About Us?

☐ Advertisement

☐ Relative

☐ Inquiry

☐ Employment Agency

☐ Friend

☐ Other _____

Last Name _____

First Name _____

Middle Name _____

Address _____

Number _____

Street _____

City _____

State _____

Zip Code _____

Telephone Numbers _____

Social Security Number (Voluntary) _____

Best time to contact you at home is: _____

If you are under 18 years of age, can you provide required proof of your eligibility to work? ☐ Yes ☐ No

Have you ever filed an application with us before? ☐ Yes ☐ No

If Yes, give date _____

Have you ever been employed with us before? ☐ Yes ☐ No

If Yes, give date _____

Do any of your friends or relatives, other than spouse, work here? ☐ Yes ☐ No

Are you currently employed? ☐ Yes ☐ No

May we contact your present employer? ☐ Yes ☐ No

Are you prevented from lawfully becoming employed in this country because of Visa or Immigration Status?

Proof of citizenship or immigration status will be required upon employment. ☐ Yes ☐ No

Date available for work ____/____/____ What is your desired salary range? _____

Are you available to work? ☐ Full-Time (please indicate 1 2 3 shift)

☐ Part-Time (please indicate Mornings Afternoon Evenings)

☐ Temporary (please indicate dates available ____/____/____ - ____/____/____)

Are you currently on "lay-off" status and subject to recall? ☐ Yes ☐ No

Can you travel if a job requires it? ☐ Yes ☐ No

Equal Opportunity Employer. This document is not a contract and will be considered only as it relates to the job in question.

EQUAL OPPORTUNITY EMPLOYER

	Name and Address of School	Course of Study	Number of Years Completed	Diploma Degree
Elementary School				
High School				
Undergraduate College				
Graduate Professional				
Other (Specify)				

Describe any specialized training, apprenticeship, skills and extra-curricular activities.

[illegible]

Describe any job-related training received in the United States military:

[illegible]

Start with your present or last job. Include any job-related military service assignments and volunteer activities. You may exclude organizations which indicate race, color, religion, gender, national origin, disabilities or other protected status.

1.	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
	Job Title	Supervisor		
	Reason for Leaving			
2.	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
	Job Title	Supervisor		
	Reason for Leaving			
3.	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
	Job Title	Supervisor		
	Reason for Leaving			
4.	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
	Job Title	Supervisor		
	Reason for Leaving			

If you need additional space, please continue on a separate sheet of paper.

List professional, trade, business or civic activities and offices held.

You may exclude membership which would reveal gender, race, religion, national origin, age, ancestry, disability or other protected status.

Other Qualifications

Summarize special job-related skills and qualifications acquired from employment or other experience.

SPECIALIZED SKILLS (CHECK SKILLS/EQUIPMENT OPERATED)

<input type="checkbox"/> Terminal	<input type="checkbox"/> Spreadsheet	Production/Mobile Machinery (list)	Other (list)
<input type="checkbox"/> PC/MAC	<input type="checkbox"/> Word Processing	_____	_____
<input type="checkbox"/> Typewriter	<input type="checkbox"/> Shorthand	_____	_____
WPM _____	WPM _____	_____	_____
		_____	_____

State any additional information you feel may be helpful to us in considering your application.

Note to Applicants: DO NOT ANSWER THIS QUESTION UNLESS YOU HAVE BEEN INFORMED ABOUT THE REQUIREMENTS OF THE JOB FOR WHICH YOU ARE APPLYING.

Can you perform the essential functions of the job, for which you are applying, either with or without a reasonable accommodation? ☐ YES ☐ NO

REFERENCES

1. _____ (Name) _____ Phone # _____
 _____ (Address) _____

2. _____ (Name) _____ Phone # _____
 _____ (Address) _____

3. _____ (Name) _____ Phone # _____

I certify that answers given herein are true and complete.

I authorize investigation of all statements contained in this application for employment as may be necessary in arriving at an employment decision.

This application for employment shall be considered active for a period of time not to exceed 45 days. Any applicant wishing to be considered for employment beyond this time period should inquire as to whether or not applications are being accepted at that time.

I hereby understand and acknowledge that, unless otherwise defined by applicable law, any employment relationship with this organization is of an "at will" nature, which means that the Employee may resign at any time and the Employer may discharge Employee at any time with or without cause. It is further understood that this "at will" employment relationship may not be changed by any written document or by conduct unless such change is specifically acknowledged in writing by an authorized executive of this organization.

In the event of employment, I understand that false or misleading information given in my application or interview(s) may result in discharge. I understand, also, that I am required to abide by all rules and regulations of the employer.

Signature of Applicant

Date

FOR PERSONNEL DEPARTMENT USE ONLY

Arrange Interview ☐ Yes ☐ No

Remarks _____

Employed ☐ Yes ☐ No

Date of Employment _____

INTERVIEWER

DATE

Job Title _____ Hourly Rate/ Salary _____ Department _____

By _____

NAME AND TITLE

DATE

Hiring Policy Compliance Affidavit

I, Brandon B. King, being duly sworn, state that I am the Estimating
Manager of Ajax Paving Industries, Inc.
 Title Name of Bidder Corporation or Other Business Entity

and that I have reviewed the hiring policies of this employer. I affirm that these policies are in compliance with the requirements of Article V, Division 6 of the Detroit City Code of 1984, being Sections 18-5-81 through 18-5-86 thereof. I further affirm that this employer will not inquire or consider the criminal convictions of applicants for employment needed to fulfill the terms of any City contract that may result from the competitive procedure in connection with which this affidavit is submitted, until such times as the employer interviews the applicant or determines that the applicant is qualified.

In support of this affidavit, I attach a copy of the application form that will be used to hire employees needed to fulfill the terms of any City contract that may result from the competitive procedure in connection with which this affidavit is submitted.

SIGNED,

[Signature]
 Title: Estimating Manager Date: 9/17/15

STATE OF Michigan)
) SS
 COUNTY OF Washtenaw)

The foregoing Affidavit was acknowledged before me the 17 day of September, 2015, by Brandon B. King.

JENEFER LYN BASHAWATY
 NOTARY PUBLIC, STATE OF MI
 COUNTY OF LAPEER
 MY COMMISSION EXPIRES Nov 4, 2020
 ACTING IN COUNTY OF

Notary Public, County of Lapeer

State of Michigan

My commission expires: November 4, 2020

APPLICATION

FOR EMPLOYMENT

We consider applications for all positions without regard to race, color, religion, creed, sex, national origin, disability, sexual orientation, citizenship status or any other legally protected status.

Position Applied For _____ Date of Application _____

How Did You Learn About Us?
☐ Advertisement ☐ Relative ☐ Inquiry
☐ Employment Agency ☐ Friend ☐ Other _____

Last Name _____ First Name _____ Middle Name _____

Address _____ Number _____ Street _____ City _____ State _____ Zip Code _____

Telephone Numbers _____ Social Security Number (Voluntary) _____

Best time to contact you at home is: _____

If you are under 18 years of age, can you provide required proof of your eligibility to work? ☐ Yes ☐ No

Have you ever filed an application with us before? ☐ Yes ☐ No
If Yes, give date _____

Have you ever been employed with us before? ☐ Yes ☐ No
If Yes, give date _____

Do any of your friends or relatives, other than spouse, work here? ☐ Yes ☐ No

Are you currently employed? ☐ Yes ☐ No

May we contact your present employer? ☐ Yes ☐ No

Are you prevented from lawfully becoming employed in this country because of Visa or Immigration Status? ☐ Yes ☐ No
Proof of citizenship or immigration status will be required upon employment.

Date available for work _____ What is your desired salary range? _____

Are you available to work. ☐ Full-Time (please indicate 1 2 3 shift)
☐ Part-Time (please indicate Mornings Afternoon Evenings)
☐ Temporary (please indicate dates available _____)

Are you currently on "lay-off" status and subject to recall? ☐ Yes ☐ No

Can you travel if a job requires it? ☐ Yes ☐ No

	Name and Address of School	Course of Study	Number of Years Completed	Diploma Degree
Elementary School				
High School				
Undergraduate College				
Graduate Professional				
Other (Specify)				

Describe any specialized training, apprenticeship, skills and extra-curricular activities.

Describe any job-related training received in the United States military.

Start with your present or last job. Include any job-related military service assignments and volunteer activities. You may exclude organizations which indicate race, color, religion, gender, national origin, disabilities or other protected status.

1.	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
	Job Title	Supervisor		
	Reason for Leaving			
2.	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
	Job Title	Supervisor		
	Reason for Leaving			
3.	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
	Job Title	Supervisor		
	Reason for Leaving			
4.	Employer	Dates Employed		Work Performed
		From	To	
	Address			
	Telephone Number(s)	Hourly Rate/Salary		
		Starting	Final	
	Job Title	Supervisor		
	Reason for Leaving			

If you need additional space, please continue on a separate sheet of paper.

List professional, trade, business or civic activities and offices held.

You may exclude membership which would reveal gender, race, religion, national origin, age, ancestry, disability or other protected status.

Other Qualifications

Summarize special job-related skills and qualifications acquired from employment or other experience.

SPECIALIZED SKILLS (CHECK SKILLS/EQUIPMENT OPERATED)

<input type="checkbox"/> Terminal	<input type="checkbox"/> Spreadsheet	Production/Mobile Machinery (list)	Other (list)
<input type="checkbox"/> PC/MAC	<input type="checkbox"/> Word Processing	_____	_____
<input type="checkbox"/> Typewriter	<input type="checkbox"/> Shorthand	_____	_____
WPM _____	WPM _____	_____	_____
		_____	_____

State any additional information you feel may be helpful to us in considering your application.

Note to Applicants: DO NOT ANSWER THIS QUESTION UNLESS YOU HAVE BEEN INFORMED ABOUT THE REQUIREMENTS OF THE JOB FOR WHICH YOU ARE APPLYING.

Can you perform the essential functions of the job, for which you are applying, either with or without a reasonable accommodation? ☐ YES ☐ NO

REFERENCES

1. _____ (Name) _____ Phone # _____
 _____ (Address)

2. _____ (Name) _____ Phone # _____
 _____ (Address)

3. _____ (Name) _____ Phone # _____

I certify that answers given herein are true and complete.

I authorize investigation of all statements contained in this application for employment as may be necessary in arriving at an employment decision.

This application for employment shall be considered active for a period of time not to exceed 45 days. Any applicant wishing to be considered for employment beyond this time period should inquire as to whether or not applications are being accepted at that time.

I hereby understand and acknowledge that, unless otherwise defined by applicable law, any employment relationship with this organization is of an "at will" nature, which means that the Employee may resign at any time and the Employer may discharge Employee at any time with or without cause. It is further understood that this "at will" employment relationship may not be changed by any written document or by conduct unless such change is specifically acknowledged in writing by an authorized executive of this organization.

In the event of employment, I understand that false or misleading information given in my application or interview(s) may result in discharge. I understand, also, that I am required to abide by all rules and regulations of the employer.

Signature of Applicant

Date

FOR PERSONNEL DEPARTMENT USE ONLY

Arrange Interview ☐ Yes ☐ No

Remarks _____

Employed ☐ Yes ☐ No Date of Employment _____

INTERVIEWER

DATE

Job Title _____ Hourly Rate _____
Salary _____ Department _____

By _____

NAME AND TITLE

DATE